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CARE OF CLOTHING

HOME LAUNDERING
DRY CLEANING
DYEING
REMODELING
THE UPKEEP OF CLOTHING
THE BUDGET

THE WOMAN'S INSTITUTE
OF DOMESTIC ARTS AND SCIENCES
SCRANTON, PA.

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Printed in U. S. A.

PRESS OF
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SCRANTON, PA.

PREFACE

Some people always look well, while others never do unless they are wearing something new. And this is not the irony of fate. It is more truthfully a matter of keeping their clothes new-appearing—not at all an impossible matter and really very interesting when one knows how.

Chapters I and II deal with *Laundering* and *Dry Cleaning* in all their phases. The result, when these two detailed chapters have been mastered, is that any one can wash white clothes without yellowing, colored clothes without fading, make starch that doesn't stick, iron, press, or steam any garment, remove stains, and, in addition, systematize all this so that it is safe and simple.

In Chapter III are given ways of restoring color, changing the color of garments, or making remnants usable by dyeing them. And all instruction is presented in such detail as to insure successful dyeing if the directions are followed and the cautions heeded.

In the chapter on *Remodeling,* all kinds of alterations are covered, which means that not only the simpler processes, such as lengthening and shortening garments, but also the more difficult processes of "cutting down," making frocks from suits, and making one dress out of two, are explained in full. Making over things is presented in just the way that will tempt women to go through their chests with the idea of sorting out everything that can do further duty of a pleasure-giving kind.

The next chapter, on the *Upkeep of Clothing,* has its material arranged under two main divisions: the care of clothing in daily use and the storing of clothing. From this chapter one learns many tricks in the storing of clothes and obtains just the ideas for which the progressive home woman is looking.

It remains for the last chapter to take up the very practical matter of budgeting ostensibly one's clothes allowance but in reality one's expenditures in general. Systematic economy is, in this way, presented so that it is actually appealing.

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HOME LAUNDERING

NEED FOR CLEANING KNOWLEDGE

1. The laundering of fabrics is a problem that every homemaker has to meet, and every woman who has ever met this problem will admit that it is not easy to solve. The scope of the laundry question is far more comprehensive than would at first be imagined. It deals not only with the processes that go to make up washing and wash-day, but also with the details of removing the many different kinds of stains, the equipment necessary for all processes, and the value of the various cleaning agents. An understanding of the nature and uses of the fabrics upon which one works is essential, too, for wool differs in its make-up from cotton, linen, and silk, which in turn differ from one another, and the soil on table linens differs from that on body linens. Consequently, in order that all fabrics may be cleansed according to their need and in the most economical and effective way, the proper choice of methods for the different circumstances must be made.

2. There are two methods of cleaning garments; laundering or cleansing with soap and water, and dry or French cleaning, which consists in using certain solvents and absorbents to cleanse fabrics. Both methods are usable on some fabrics, but generally one is more feasible than the other. The style of the garment, as well as its material and purpose, has its influence on the choice of a cleaning agent. Soap and water sometimes affect the fit or fashion, as well as the color and texture of clothing, so certain articles cannot be entrusted to the tub; but the majority of materials in ordinary use in the household, as well as warm-weather clothing, children's garments, and body linens, are made to stand tubbing.

3. In most homes, the laundering is done at home by the woman herself, the maid, or the laundress. Some women prefer to send the clothes to a convenient laundry, but even in this plan there are certain articles that require special attention; so the homemaker invariably finds a supply of laundering materials and an understanding of laundering necessary to keep the garments and linens in good condition and to prolong their length of service.

If only part of the family washing is done at home, it can be done at odd moments, but if all is done at home, then special thought must be expended to handle it efficiently. In this connection, a regular program, if decided on and followed, will save much time and energy.

4. Since time immemorial it seems that wash-day has meant Monday and more often than not, "Blue Monday"; but of late years Tuesday has been growing in popularity as wash-day. This plan leaves Monday as a day in which the housewife can replenish her larder and put her house in order after the Sunday's rest or entertaining. Also, it gives her time to look over her wash, mend the holes or tears that might become larger in the laundering, remove the stains that should have attention, prepare food with a view to having something for the next day, and in the evening place the washing apparatus and piles of clothes in readiness without infringing on the pleasures or quiet of Sunday. Then when Tuesday morning comes, no time need be lost because of the disorganization that

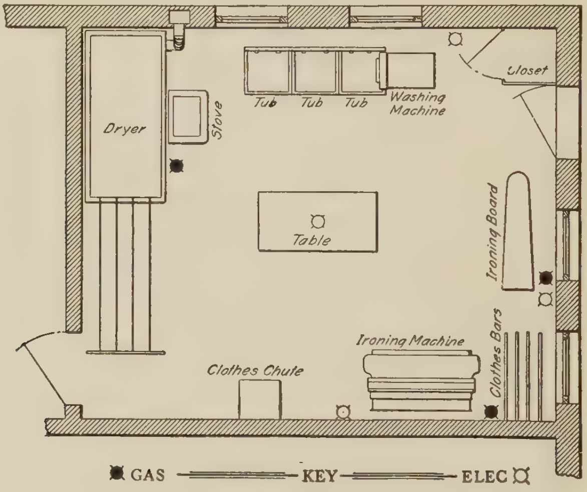


FIG. 1

so often reigns in the house on Monday mornings. Such a program as this is found as helpful as a regular program for carrying out the laundering processes.

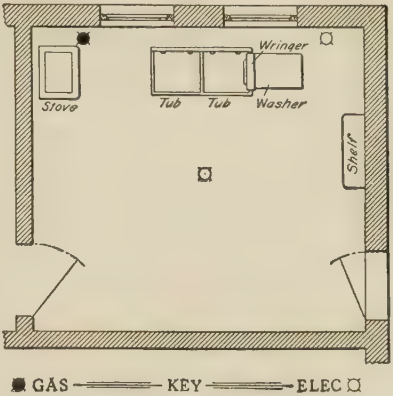


Fig. 2

ROOM FOR LAUNDRY WORK

5. An ideal arrangement of laundry appliances is possible when there is a laundry room so planned as to meet the need for hot water and easy handling of the work. A good plan is to have such a room adjoining the kitchen; but a basement laundry, which is found in many small houses, is very satisfactory. If there is running water, the same pipes will supply water for the kitchen and laundry, and the same chimney may be used for both rooms.

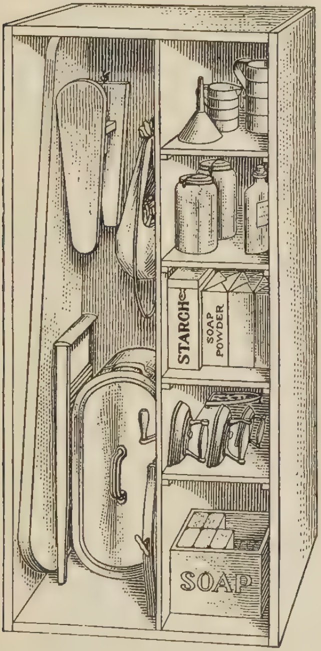


Fig. 3

In a large house where a good-sized room may be had for this purpose and the various labor-saving devices can be purchased, Fig. 1, which shows a complete laundry, may be followed. But in the average home, where less room can be devoted to this purpose and only the washing is done in the laundry, the ironing being done in the kitchen, Fig. 2 provides a suitable arrangement.

6. In many homes, the kitchen must serve the purpose of laundry room also. In such a case, a special built-in closet is a great convenience. If possible, a closet of this type should be large enough to hold a washing machine and portable tubs, if such are used. If, however, the required space is not available, Fig. 3 provides a suggestion for a smaller closet that proves a good substitute.

When the clothes are washed in the kitchen, the sorting and as much of the other handling as possible should be done in another room. It is a wise precaution, too, not to prepare any food in the kitchen until the washing has been finished.

EQUIPMENT FOR LAUNDERING

SELECTION OF EQUIPMENT

7. The selection of the articles that make up a laundry outfit is a subject that has much more import than is at first conceded. With the great number of labor-saving appliances that are from time to time put on the market, many of them presenting problems of mechanical apparatus, the question of which are the most practical and economical is one for consideration.

8. An advertisement or a salesman will present the good points of the articles represented, and these good points, to be sure, should all be weighed carefully; but there are other factors also that enter into the final selection. The amount of money to be spent, the space that can be devoted to laundry work, and the amount of washing to be done, all play their part as determinant features. Consequently, the quantity of new equipment that would be suitable and possible in one family will vary from that in another family.

9. Probably it is not necessary in some homes to invest in an entirely new laundry outfit. The old equipment may still be satisfactory with a little change. Perhaps the tubs have been at a back-breaking height, but will serve as well as new ones if reset properly. Or perhaps the resetting of the equipment will result in better light and the taking of fewer steps. Then, the remainder of the money to be spared for bettering laundry conditions can be put into adding a mangle, a drier, or some other device invented since this particular laundry was originally equipped.

10. Following are suggestions as to the articles that are practical for the work of the home laundress and the materials that are on the market. This information should prove of value in helping you to make the selections that will bring the greatest amount of satisfaction possible from the well-equipped laundry.

WASHING MACHINES

11. Value of Machines.—Perhaps there is no device among those of the housekeeper which saves so much valuable time and takes out so much drudgery from housework as does the washing machine. Even the ever-necessary vacuum cleaner must give place to the priority of the washer, which, if self-running, works at one task, doing it well, while the housekeeper does something else.

The real value of the washing machine must be computed in terms of time and energy saved, as well as in money. The actual investment takes into consideration the initial cost, the cost of operation and maintenance, and its approximate length of life. Another point to consider is the length of life of the materials that are washed. In considering this factor, remember that the machine in which friction is reduced to the minimum, saves wear and tear on the fabrics.

12. Kinds of Machines.—There are a great many different washing machines in use, and each claims a very satisfactory method of cleaning. Therefore, before you purchase a washing machine, you should make a study of the types in general use and, if possible, have a demonstration of each.

Of the types from which to make your choice, the four main ones are: the "*dolly*" *machine*, the *cylinder* or *rotary machine*, the *oscillating* or *rocker machine*, and the *pressure and suction machine*. A fifth type, the *washboard machine*, is sometimes considered. All of these machines make use of some principle to force the dirt from the clothes into the soapy water. The principle may be *friction*, *agitation*, or *pressure and suction;* and the *motion* may be *rotary* or *revolving*, *oscillating* or *rocking*, and may be in one direction or reversible.

The *motive power* may be *hand power*, *water power*, *gasoline engine*, or *electric motor*. Although there is no doubt that the power machine is an improvement over the hand-power machine, the choice of a machine should be based not on this alone, but also on its action and the effect it has on the clothes as well.

13. The **dolly** type, which has a wooden dasher similar to a three-legged stool, cleans the clothes by rubbing them. The dasher revolves and reverses in the center of a tub, the sides of which are corrugated so that considerable friction results while the clothes are rubbed against the sides of the tub. Since the action of this machine is mostly agitation and friction, it is best suited to the cleaning of heavy garments and bedding, it being somewhat strenuous for dainty garments.

14. In the **cylinder** or **rotary** type, the clothes are placed in the inner one of two drums or cylinders, which is perforated and has little shelves, or cleats, that lift the clothes and drop them so that water is forced through them. After a few revolutions, the action is reversed. Since no friction is caused by a rotary machine, it is a practical investment and will prove a saving of energy as well as of wear and tear on clothing.

15. In the **oscillating** machine, there is a metal or wooden box, usually corrugated, which rocks back and forth and throws the clothes from side to side in the motion of a figure 8, placed sidewise. The water is thus forced through them, and the cleaning accomplished by this process. This type of machine is satisfactory for general family washing, but when operated by motor power it is a little severe for dainty lingerie or baby clothes unless they are first placed in a strong cheesecloth bag.

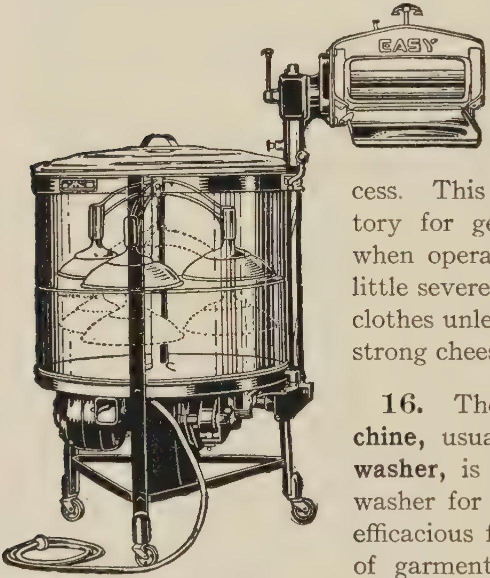


Fig. 4

16. The **pressure and suction machine,** usually known as the **vacuum washer,** is probably the best type of washer for fine laundering and is still efficacious for the heaviest and dirtiest of garments. The cleaning is accomplished by vacuum cups, or metal cones, which change position with every downward stroke. The air contained in the cups forces the soapy water through the meshes of the garments on the down stroke, and on the up stroke, suction draws the water again through the meshes, carrying with it the soil.

The first mechanical application of the air pressure and suction principle of washing was made in 1878, when a hand plunger was attached to a wooden tub. Since that time improvements have been made, gradually changing the washer into its present perfected form. Fig. 4 illustrates a modern, copper, electric washer of the vacuum type with wringer attached. The up-and-down motion of the cups is shown by the dotted lines.

Another vacuum-cup machine has been invented, which is ideal from the standpoint of saving energy. The washer is so arranged that, when the clothes are clean, the whirling cylinder is flooded with clean water for rinsing. After rinsing, the water is drained off; then two or three minutes' additional whirling dries the clothes sufficiently for the line. Whirling the cylinder for a longer time makes the clothes ready for the ironing board without their being hung out at all. This is, of course, practical for rainy-day or apartment use.

17. The **washboard** type of washing machine has two corrugated boards shaped like half-cylinders, which swing, squeeze, and rub the clothes top and bottom. Considerable friction results, so this style of washer is rarely practical for the cleaning of lingerie or any other form of fine clothes. A well-known kind of washboard washing machine, and the least expensive of all, is the **cradle.**

18. Besides looking into the qualities of the various makes, consider also the relative merits of **wood and metal machines.** It is generally conceded that metal machines are more sanitary and hence more easily cared for than wooden ones. A simple scalding cleans a metal machine quite satisfactorily, whereas, with constant use, grime and bacteria are almost sure to collect in the fibers of the wooden machine. Wooden machines, moreover, warp and splinter after they have been used for some time.

19. Care of the Washing Machine.—Much saving in repair bills and a longer period of usefulness are possible when tools are well cared for. Consequently, as an economic measure, the housewife will do well to apply any of the following suggestions that are in accordance with the kind of washer that she uses:

1. Oil regularly where needed.
2. Tighten the bolts, and keep the belts at the proper tension if the machine is motor-driven.
3. Do not overload the machine. Fill it with water to the level designated and wash the proper weight of clothes

for the particular machine in use. The weight varies with different makes and sizes. Pamphlets containing information about these matters can be obtained from the washing-machine dealers.

4. After using, rinse the machine thoroughly with hot water, preferably by operating it for a minute. Drain and dry it. Drying metal machines prevents much discoloration.
5. Use soap and water to remove grease or oil stains from the machine. Scouring powders should be used with care on metals to avoid injuring the surface. The following methods may be used with safety:

   Aluminum—Wash with hot, soapy water, as alkalis darken aluminum.

   Copper—Rub with vinegar and a fine scourer, like whiting; polish with rottenstone mixed with oil; wash with soap and water; or wash with a preparation made by mixing $\frac{1}{2}$ cup of vinegar, 2 tablespoonfuls of salt, and 2 tablespoonfuls of kerosene.

   Nickel—Moisten whiting with water or ammonia, rub, and wash with soap and water.

   Zinc—Use the same treatment as for nickel. Hot vinegar may be used for obstinate stains.
6. In a *wooden* washer, keep water to a depth of about 3 or 4 inches when the washer is put away after use. This prevents it from drying, warping, and leaking.
7. Between wash-days, keep the lid of wood-tub machines open 1 or 2 inches to allow free circulation of the air.

OTHER EQUIPMENT

20. Hand Plunger.—The hand plunger is really a miniature vacuum washer, consisting of a cone or an inverted funnel on a handle similar to a broom stick. Such a plunger, with detachable handle, is shown in Fig. 5. It is best employed as an aid in rinsing, since its use requires too much energy to consider it a satisfactory substitute for a washing machine. A portable tub set directly on the floor provides the most comfortable way to use it.

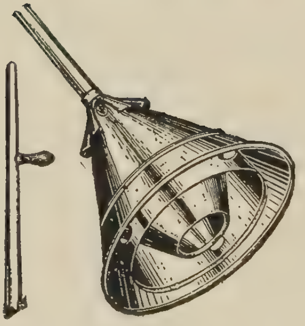


Fig. 5

21. Tubs.—No matter what method of washing is followed or what other utensils are used, tubs, which are broad, open-topped vessels, are an essential in washing. They may be either portable, that is, capable of being moved from place to place, or stationary. To obtain the desired results from tubs, whether stationary or portable tubs are to be used, thought should be given to the service that may be expected from them as well as to the first cost.

Portable tubs are made of various kinds of materials, such as wood, galvanized iron, and fiber. They come also in a variety of sizes. A typical portable tub of galvanized iron is shown in Fig. 6.

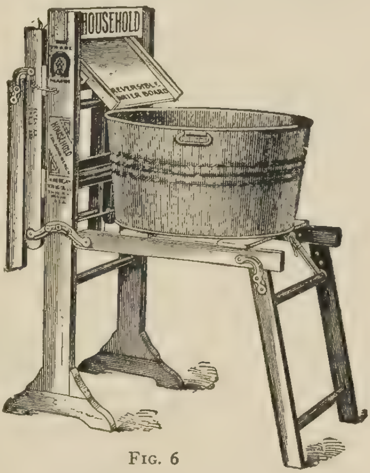


FIG. 6

Stationary tubs are generally made of soapstone, porcelain, or enameled iron. Those of white enameled iron have an advantage in that they reflect color readily and make it easy to detect rust or other stains, too much bluing, or bleeding of dyes in colored clothes.

22. The *height of the tub* should be considered to make comfortable working possible. In the securing of an easy height, place the tub sufficiently high so that the worker's back is straight and the forward bend is from the waist. Remember, too, that the working surface is not the bottom of the tub but the sloping side against which the washboard is placed, and take this into consideration in determining the desired height. Some authorities claim that a tub should be about 36 inches high for a woman 5 feet 5 inches tall, and others claim that this height is better for a woman 5 feet 3 inches tall, with an additional $\frac{1}{2}$ inch added for each additional inch in height or subtracted for each inch under this average. These ratios, however, are only approximate, whether a woman has long or short arms or is long- or short-waisted largely determining the proper placement of a tub.

23. Wash Benches.—In the use of portable tubs, a bench is needed to hold them. Fig. 7 shows the old-fashioned bench made to hold two tubs. It is made in such a way that its presence on the back porch, when not in use, need not disturb the housewife who is endeavoring to keep her porch attractive.

A folding bench attached to a wringer standard is illustrated in Fig. 6. One side is shown folded up, while the other holds a tub and has its reversible drip board in position to transfer clothes from the wringer to the tub. Such a bench is highly satisfactory, as it not only is sturdy but also folds up into a small space.

24. Washboards.—Boards on which clothes may be rubbed are made of brass, zinc, or glass, the one in Fig. 7 representing the general appearance of these various types. There is very little choice between the metal and the glass, so long as the metal has no sharp points that might catch and injure the fabrics, and the glass is not treated in such a way as to break it. The rougher, zinc boards remove dirt more quickly, but are more likely to injure delicate fabrics.

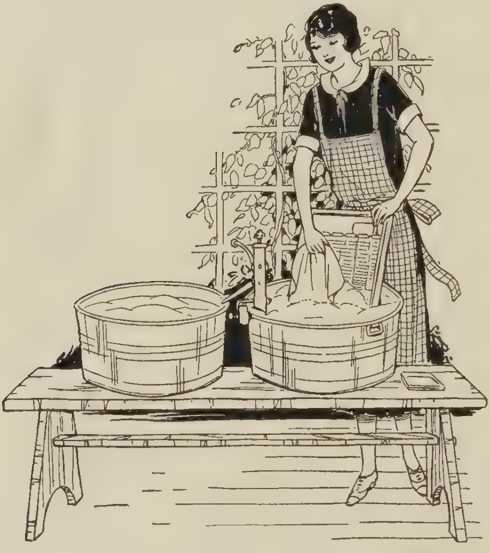


Fig. 7

A new type of washboard has stiff bristles on the surface, over which the clothes are rubbed. If you have used the small stiff-bristled brushes to clean soft collars and other especially soiled spots, you will readily understand the virtue of such a board.

Small suction caps, made especially for the purpose and very inexpensive, may be purchased and attached securely to each foot of the board to keep it from sliding around in the tub.

25. Wringers.—A clothes-wringer is an appliance having adjustable rollers, usually rubber covered, and used to press the water out of clothes after washing. Wringers come under various trade names and in different sizes, and each has its particular merit.

Also, they may be run by either motor or hand power. The kind that is clamped on to a tub is shown in Fig. 7, and the motor power type is shown in Fig. 4. Be very careful in your selection of a wringer so as to obtain one that will give the greatest satisfaction for your particular needs. One with a reversible drip board is best.

Not only do wringers save time and energy, but they prevent a great deal of strain that would result if the material were hand wrung. To use a wringer correctly, take care to fold the garments evenly, turning all buttons to the inside. Also, be careful about the tension, as too tight pressure will make wrinkles that are hard to remove, and a little moisture left in the materials will leave more chance for the action of the sun and air.

26. To lengthen the period of serviceability of a wringer, give it proper care. Oil it frequently, and remove any black grease that may have accumulated. Also, release the screws when the wringer is not in use so that the rollers will not become flat, remembering, when you tighten the rollers again for use, to turn the screws on both ends at the same time so as to make the pressure even.

If a gummy substance collects on the rollers because of the use of hard water, remove it by rubbing them with a cloth dampened with kerosene. Then wash the rollers quickly with soap and water, as kerosene is harmful to the rubber if allowed to remain on it. When not in use, besides loosening the tension, cover the wringer to protect it from dust.

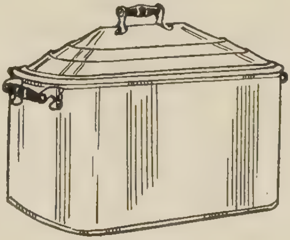


Fig. 8

27. Boilers.—Receptacles used for boiling clothes may be either round or oblong, the oblong being the more practical as they hold more clothes and fit the stove better. Fig. 8 shows an oblong boiler with a fitted cover that can be used or removed in sections.

Boilers are made of tin, tin with copper bottom, and all copper. Those made of copper are preferable because of their superior wearing quality. Moreover, when they are used, there is less danger of the forming of rust spots on the clothing. Another point in their favor is that this metal transmits heat more readily than does tin. Do not make the mistake of boiling clothes in galvanized tubs, pans, or buckets, as a scum, which is very difficult to remove from clothes, often rises as a result of the contact with the galvanized iron.

Clothes-boilers may be preserved and kept free from stains by the same methods as are recommended for washers in Art. **19** (5).

28. Clothes-Baskets.—Baskets in which to carry wet clothes to the line are made in various sizes. In purchasing one, choose the proper size for your purpose and make sure of strong construction. Notice especially that there are no loose ends of the reed of which the basket is made, for dainty garments will catch on such rough ends and tear.

Clothes-hampers for holding soiled clothes until wash-day also are made in various styles and sizes and always have a cover. These hampers may be of reed, paper mâché, or metal, the latter two kinds, of course, being more sanitary. *Laundry bags* may be used instead of hampers, if desired.

Clothes chutes sometimes have a box built at the bottom to hold the clothes. Such boxes should always be at least 12 inches off the floor, and should have a fine, latticed bottom and auger holes bored in the sides to allow for ventilation.

29. Clothes-Lines.—Clothes-lines may be of hemp rope, galvanized wire, or wire covered with cloth. Rope lines are the cheapest, and wire lines the most durable, although in time they are likely to become corroded and stain the clothes. Whatever the nature of the clothes-line, to lengthen its utility and to keep it clean, it should be taken in after every wash-day.

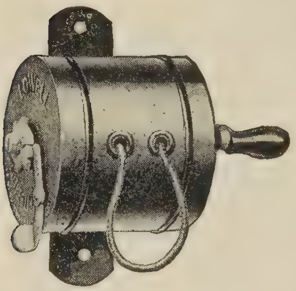


FIG. 9

In Fig. 9 is pictured a clothes-line that winds up inside of a metal container, which is attached to the wall. Its advantages can readily be seen, for it can be used indoors without taking up any room when not in use and it can be used outdoors with the same advantage and without accumulating dirt.

30. Clothes-Pins.—The wooden clothes-pins in general use are most satisfactory for securing clothes to clothes-lines, but there is also a wood and metal-wire clothes-pin that holds together firmly by means of a spring and is advantageous for outdoor drying on a windy day. The latter kind is shown in Fig. 10.

It is very necessary that clothes-pins be kept clean; otherwise, they will leave black marks where they come in contact with wet materials. Frequent washing, therefore, is essential, as is also storing in dust-proof places. If a *clothes-pin apron* or *bag* or any other open receptacle is used, the top should be folded over or pulled tight to keep all particles of dirt away from the clothes pins.

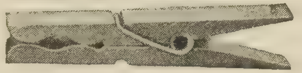


FIG. 10

31. Clothes-Driers.—Nothing is better than sun and air for the drying of clothes, but there are times when these agents are not available. For homes having very little outdoor space or for use indoors during stormy or freezing weather, clothes-driers of various types have been invented.

One excellent type of drier for a small room is a light **drying rack** that can be pulled up against the ceiling where an oblong box holds it. For service in a small space, there are also several kinds and sizes of **umbrella-shaped driers.** Some are constructed so that a pole in the back yard supports their radiating arms in sunny weather, and sockets on the wall support the arms for service at other times. One type, called the **hill drier,** is illustrated in Fig. 11. It folds up so that a sack can be slipped over it to keep the rods clean when not in use.

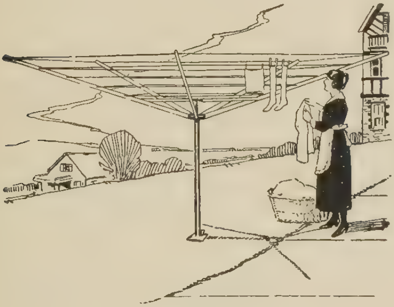


FIG. 11

In the home where a fairly complete laundry is possible, a **combination drier and stove,** as shown in Fig. 1, is the most efficient. In such a drier, the heat passes through from the stove just as hot air passes around the oven of a cook stove. The stove holds the wash boiler, the irons, and the starch kettle.

32. Some homes contain a **drying room,** which is fitted with heating pipes and which is located adjoining the laundry or kitchen. With such a convenience, the one precaution necessary is to be sure to have the room well ventilated in order to carry off the steam, for it is the congestion of steam in a drier that yellows clothes. The objection that an enclosed indoor drier does not keep clothes white is not true, if the drier is sufficiently ventilated and the clothes are adequately rinsed.

33. Ironing Boards.—In the selection of an ironing board, space and stability are the important considerations. The average homemaker may choose one of three types: a board made with a self-supporting stand that folds up, as shown in Fig. 12; a plain skirt board, which requires a table or support of some kind; or a board that is hinged to the wall and has a folding prop as a support. The latter kind can be concealed behind a panel.

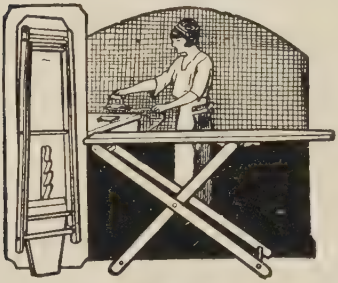


Fig. 12

If a new home is being planned, in which a whole basement room can be devoted to laundry equipment, there is probably no more satisfactory ironing board made than the one on a metal standard which is set in the concrete floor. This eliminates entirely any possibility of a "wobbly" board. Some makes of these must be installed when the house is built, while others can be added to any laundry room or space.

Whatever kind the board is, it should be substantially built so that it stands firm. Also, it must be of the proper height for the worker. As practically all stands are adjustable, it is an easy matter to place the board at a height that will be correct for you. As you stand erect, have the board just high enough for the palm of your hand to lie flat on the board when your arm is held straight down without bending the elbow.

Consider also the position of the supporting arm underneath, and choose a board that does not have arms so arranged that a skirt placed over the board has its lower edges rumpled by the time the ironing is completed.

34. For *padding*, avoid a cushion-like surface, but have the board padded so that there will be no spring to it. Heavy felt or double-faced cotton flannel or silence cloth like that used on tables makes a good pad. Old blankets also make excellent coverings. Particular care is necessary to have no wrinkles in the padding, as these leave undesirable shiny streaks on garments pressed over them, particularly wool garments.

35. For the *ironing sheet* over the padding, new unbleached muslin that has been washed to remove all dressing, is very good, or worn sheets may be used, though they do not last long as a rule. One should have at least two ironing sheets so that they may be changed often, as frequent washing not only insures a clean board, but lengthens the life of the covering.

The top covering should be large enough to cover the board entirely and lap over onto the under surface an inch or two. There are various ways of fastening, but preference should be given to the method that permits ease in changing the coverings and does not require much time. A very successful plan is to have brass or ivory rings sewed to one edge about 6 inches apart. Then, on the opposite edge at corresponding points, sew tapes with ends long enough to reach across under the board, through the rings, and tie.

36. To protect large pieces, such as table-cloths, from falling to the floor, a deep *pocket* of muslin may be attached to each side of the ironing sheet so that it extends from end to end of the board and within 6 or 8 inches of the floor, as in Fig. 13.

Cut the pocket from unbleached muslin or a similar material, having it about 40 inches square, finish the edges with a narrow hem, and sew a loop of tape or a metal ring at each corner. Attach small metallic or stiff wire arms underneath the board so that when these are swung out the tapes may be placed over them, as at *a* and *b*. When not in use, the arms may be swung back underneath the board.

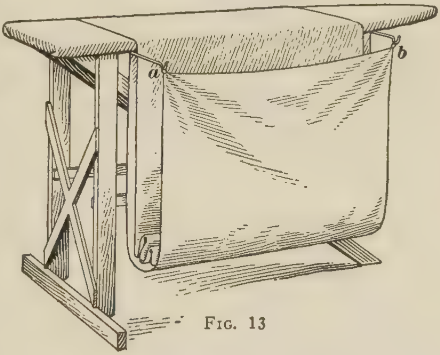


FIG. 13

37. *Iron stands* on which to rest the iron when not in use, are necessary on all boards, the permanent attachable metal stand being much more satisfactory than the wrought-iron stand or inverted tin covers, both of which have a way of slipping off the board.

It is advisable to cut a piece of sheet *asbestos* to fit the broader end of the ironing board, and fasten the edges down with thumb-tacks.

This prevents scorching the ironing sheet when the iron stand becomes hot. Sometimes pieces of tin about 8 inches wide are tacked across the board in place of asbestos, but care must be taken to cover the edges so that garments cannot possibly become caught and torn.

38. Irons.—There are various types of irons; the old-fashioned, stove-heated flat, or sad, iron made entirely of iron, irons with removable wooden handles, also electric, gas, gasoline, charcoal, and alcohol irons. Although the old-fashioned, stove-heated iron can do its work efficiently, it cannot bring the comfort and ease to an ironer that a self-heating iron can. The woman who employs a self-heating iron does not have to consider saving steps, for instead of ironing near a hot stove or going back and forth to exchange a cold iron for a hot one, she can iron in one spot, and that a comfortable one. The type chosen, however, will depend on the facilities available for heating, but it is well to know the outstanding characteristics of each type.

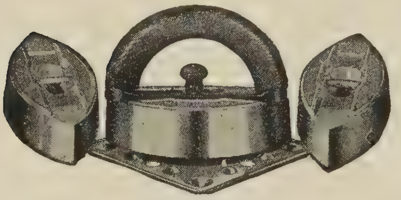


FIG. 14

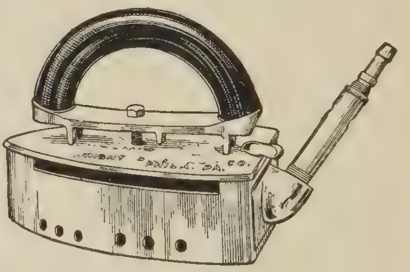


FIG. 15

39. Among the **stove-heated irons,** flat irons with patent wooden handles and facing of steel, Fig. 14, are more modern than the old-fashioned irons of wrought iron, the most modern style having a removable handle and upper casing, as has the iron in Fig. 17. Such irons, which are likely to wabble, do not hold the heat so well, nor are they made in so many different shapes as the wrought-iron ones. They are, however, easier on the hands. Irons of both types are usually purchased in threes to allow for a sufficiently frequent change of iron.

40. Among the **self-heating irons,** there is the *gas iron*, which is illustrated in Fig. 15. The rubber gas pipe of this iron is one of the greatest drawbacks in ironing by gas. This pipe will be safer and give greater service if wound with spiral wire to prevent twisting and cracking. Then, too, it is necessary to beware of drafts that may fan the flame when a gas iron is in use.

In the use of *gasoline and alcohol irons*, the same precaution must be taken in regard to drafts. Also, there is danger from fire when leaks appear in the tank.

In *charcoal irons*, the fuel gives out an even heat, but not an intense enough heat for continuous ironing. Also, the fumes are unpleasant and the fire is dangerous and soot-giving if fanned the wrong way.

Although the *electric iron*, Fig. 16, is generally preferred, a few cautions in its use are necessary. The electric cord should be watched, for if any wires break there is danger of shock and fire. These breaks can be mended with adhesive tape when the current is disconnected. An electric iron should not be allowed to become overheated from too constant use. Instead, the power should be turned off occasionally. Another caution is that a current of sufficiently high voltage should be used where an electric iron, or, in fact, any other electrical appliance, is attached, so that fuses will not be constantly burning out. Also, no other electrical appliance should be attached to the same connection by means of a double socket, while an electric iron is in operation for their combined demands are likely to burn out the fuse.

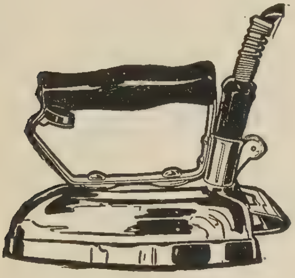


FIG. 16

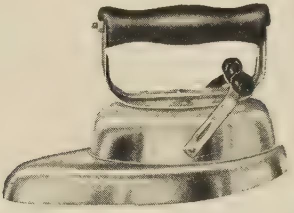


FIG. 17

41. In the choice of suitable irons, besides considering the types of irons, one must know that irons are made also for different kinds of work. For example, small irons are used for tiny, fine pieces; narrow, pointed irons, one of which is shown in Fig. 17, for garments on which there is shirring, fluting, or like trimming; and very large, heavy irons, for tailoring. If only one iron is to be purchased, it should be of average size, one that weighs from 6 to 8 pounds. Too light an iron necessitates more pressure brought to bear on it. Since the point has the most work to do, another matter to consider in the purchase of an iron is that the point should heat quickly and retain its heat well.

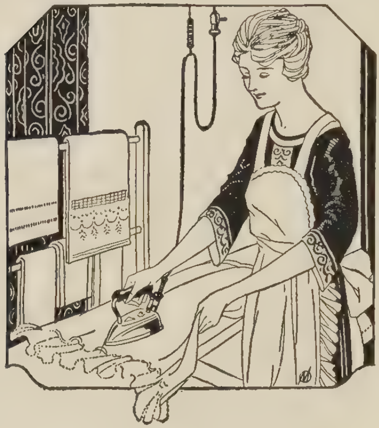


Fig. 18

An electric iron may be tested for the time required for heating and for the evenness of its heating surface, by standing it on a well-protected heavy piece of paper and then turning on the current and letting it run without moving the iron. The time required for heating and the evenness of the scorched spot will furnish the desired information.

42. Among the appliances that lighten the labor of ironing and contribute toward convenience is the device illustrated in Fig. 18. It is a spring that is suspended on a cord and that has a hook to hold the cord of the electric iron so as to keep it from rubbing back and forth over the ironing board and rumpling and soiling the articles that are being ironed.

In the illustration is shown also the electric fixture to which the iron is attached. When the *double socket*, Fig. 19, is screwed into the fixture, the iron can be attached to one socket and an electric bulb to the other, thus utilizing one fixture for two purposes.

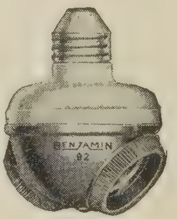


Fig. 19

43. Old-fashioned irons and sometimes irons with removable wooden handles require *iron holders*. These should be oval in shape so that there will be no corners to touch the iron and become burnt. Also, holders should be sufficiently thick to keep the heat from penetrating. Ticking and asbestos are used in the ready-made holders, but folded stockings covered with ticking, denim, or other stout material make good holders. Wool does not make a serviceable covering, as it soon becomes charred.

The alternate use of two holders will be found comfortable, as cool holders will keep the hands from becoming parched or swollen from continual heat.

44. Mangle.—A mangle is an **ironing machine** that has rollers, either hand-turned or power-turned, working on the principle of the wringer. The cheapest, as to both cost and operation, are *cold mangles* that press the materials between unheated wooden rollers; but these machines do not press clothes dry and glossy and sterilize them; nor are they always able to take out all wrinkles. They are little better than wringers, except that they are larger, and after they have done their best, the articles must be hung up to dry.

Heated mangles have one steel roller or shoe that acts as iron and a padded roller that acts as ironing board. There are different sizes, the most satisfactory for the majority of homes being the size that irons large sheets after they have been folded once. Such mangles are a great time and labor saver in homes where there are large families and hence large washings, but they are rather expensive to purchase and install, so are not, for the small family, an economy in money. Mangles that are heated by electricity, gas, gasoline, or kerosene, may be had, thus fitting the needs of different localities. Very often electric equipment of this sort may be connected with a separate meter at lower rates than those for lighting.

45. Just how much ironing is done by an ironing machine depends on the skill of the operator and the type of machine. Some mangles have attachments for the ironing of gathers and the shaping of garment parts, and other mangles have open ends upon which collars, cuffs, and other parts of garments can be ironed.

The intelligent operator is able to do from 75 to 85 per cent. of her ironing on the mangle, thus making it possible to complete the ironing in from one-third to one-fourth the time it would take by hand. In this way, the necessity of a laundress may be eliminated, the ironing can be done with comfort, the work is made interesting, the life of the clothes is prolonged, and the home woman can use an abundance of fresh linen without having to think of the ironing.

46. In the purchase of an ironing machine, take care to choose one that is easily operated. Some are operated by the feet, leaving both hands free to arrange the articles that are being run between the rollers. This is an excellent feature, for careful folding is one of the secrets of successful ironing in a mangle. Another point to be sure of is that the electric switch of an electrically controlled mangle is placed conveniently. Then in case a garment becomes wrinkled or twisted around the roller, it can be released quickly without its being scorched or the worker being burned. Next, take care to secure a mangle that is large enough for the laundry that it will have to iron. Also, examine the mangle before purchasing to see that it can be readily cleaned, as much of its success depends on its being kept perfectly clean. Ease in its use is another important point, so be sure to purchase one that permits the operator to be seated while ironing.

47. The care of a mangle is somewhat similar to that of the wringer, the iron, and the ironing board. When not in use and also when being heated, the rollers should be kept apart. The parts should be well oiled and cleaned regularly. The steel roller should be waxed and wiped so as to be kept as smooth and clean as the ironing surface of an iron, and the padded cylinder should be padded as evenly as an ironing board. Also both covers and padding should be washed occasionally, and the mangle, when it is not in use, should be covered to keep out the dust. By these means, better service can be obtained from ironing machines of all kinds.

48. Clothes Horse.—To insure having clothes perfectly dry before they are put away, and so reduce to a minimum the likelihood of their wrinkling after ironing, it is well to have some sort of rack on which to hang them that will permit the free circulation of air through them. For this purpose, any small-size drier of the revolving type, or the type that is folded up against the wall, as shown in Fig. 20, or is pulled up against the ceiling is satisfactory. There is also a clothes-tree type with long arms that fold when not in use. The clothes horse that folds up like a screen, a portion of which is evident in Fig. 18, is, perhaps, the least satisfactory of all driers, since it has great propensities for tipping over.

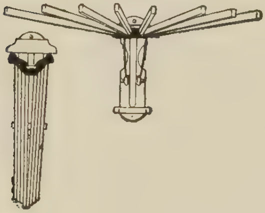


Fig. 20

49. Miscellaneous Articles.—Other helpful articles for laundering include a *pan* or *pail*, a *spoon*, a *measuring cup*, a *strainer* for starch, a *clothes stick*, and a *sprinkler* or *whisk broom*, which serves the same purpose. One kind of tin sprinkler is pictured in Fig. 21. Others vary somewhat in shape and may be aluminum rather than tin, but all have a general semblance. Also, a very effective sprinkler consists of a cork with a perforated top, which may be purchased in the 10-cent store and used in any bottle.

A *sleeve board* is not an essential, but it makes the ironing of sleeves a much shorter and simpler matter, and is also a boon in the ironing of baby clothes. It should have one broad end and one narrow end, and should be on a standard of its own.

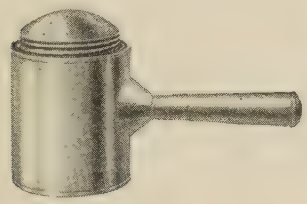


FIG. 21

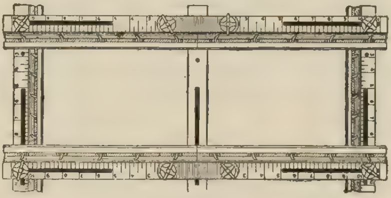


FIG. 22

Curtain stretchers act as time savers to the woman who does not send out her curtains. The ones shown in Fig. 22 are an improved type that make very simple the drying of curtains to measurements. The dark spaces are the slots through which the clamp screws slide when the stretchers are changed to fit the size of different curtains. Stretchers will take up less room if they have an easel, by means of which they may be stood up along a side wall.

LAUNDRY AIDS

50. In addition to the equipment used, there are countless materials on the market for the purpose of removing soil, grease, or stains, renewing fabric, restoring color, and bleaching. Such aids include soap, soap powder, soap flakes, borax, starch, bluing, and many others.

51. Soap.—In choosing soap for laundering, the consistency is a determining factor. Laundry soaps may be yellow or white, according to the amount of rosin in them. Rosin is what adds weight to soaps, and a little is not objectionable as it helps also to make suds, but too much makes a sticky scum on clothes. Soaps may be strong according to the amount of soda or lye in them. If there is an excess of soda or lye in a soap, the hands will soon disclose the fact, because they will have a tendency to shrivel.

In the choice of a safe and effective soap, the garments to be cleaned must be considered. For all fine, light fabrics of cotton, silk, or wool, a *mild white soap* or soap chips or jelly should be used. A heavy, strong soap containing much free alkali hardens wool, roughens silk fibers, and causes both to turn yellow; consequently, a soap of this kind should be avoided for such fabrics.

For all badly soiled materials, where the fabric is durable in both texture and color, a *good yellow soap* should be used, as such soap removes the dirt more easily. Care should be taken in choosing such laundry soap, however, as some yellow soaps contain considerable rosin and are hard on the hands.

For an all-purpose household soap, *naptha* is very popular. This soap is suitable for use in cold or lukewarm water, so it meets the need of the home where hot water is scarce. As it is harmful to some skins, its use is a point to be settled after experimenting.

52. Preparing and Using Soap.—When using *soap chips*, dissolve about 3 tablespoonfuls of them in hot water from the faucet, whisking them about in the bowl or pan to obtain plenty of suds. Cool this solution by adding water until it feels warm to the hands and the tub is full enough to allow the garments to be completely immersed.

If the *soap jelly* is preferred, shred white soap into a bowl or some similar receptacle and then add sufficient water to cover it, usually 1 cupful of water for each rounding tablespoonful of shredded soap, and then add ½ teaspoonful of borax. Heat the mixture slightly until it is free from lumps, but do not allow it to boil. About ½ cupful of this may be used in a tub of water. Guard against the use of too much soap, as an excess will have a tendency to fade or "harden" a color.

A *good soap for special cleaning* of dresses, suits, etc., can be made at home. Cut pure white soap into pieces about ½ inch thick and 2 inches long, cover with equal parts of ether and ammonia, let it set 24 hours, and then remove from the pan and dry in a cool place. This will remove grease, paints, and many other stains.

53. In the use of any form of soap, use only enough to make a suds that will "hold up" during the washing process. More than this makes a thick cushion-like mass that prevents the water from being forced through the fabric, and since it is this action that accomplishes the actual cleaning, it is evident that too much soap hinders, rather than helps, the process.

54. Purchasing Soap.—Economy in purchasing soap does not mean the buying of cheap soaps, for these soaps may, and probably do, contain ingredients that harm the clothes seriously, causing weak spots or even holes, and affecting the color and "feel."

The only safe economy is the practice of buying soap in quantity, removing the wrappers, and storing it in a dry place to harden. A fairly hard soap, so treated, will last considerably longer than if this precaution is not taken.

55. Bluing.—In order to counteract the tendency that white clothes have toward yellowing, a liquid or solid blue is added to the last rinse water. This bluing may be of vegetable, mineral, or chemical extraction of one of the following kinds.

56. Indigo blue, the blue in earliest use, has been practically abandoned in its original form, as it was made from the indigo plant after a very tedious process. The indigo blue now in use is a chemical composition. In its favor is the fact that it contains no iron and so does not cause iron rust, but against it there are the objections that it gives a dull, almost black-blue instead of a good color, it often does not stand the heat of ironing well, and it is insoluble and therefore likely to settle on the clothes if not constantly kept in motion. Its insolubility adds also to its original expense, for it is not used up completely and is therefore less efficient than one that can be entirely dissolved.

57. Ultramarine blue, a ball or block bluing, is another bluing now obtained in chemical composition instead of in its original form, which was the lapis lazuli finely ground. Because of the two points in its favor, namely, that it has a good, clear color and is free from iron, it is the bluing found in use in many homes. It is, however, an insoluble bluing that colors clothes by leaving a deposit of tiny particles on the fibers and is, therefore, likely to streak. Also, a portion of it is clay, so it is not a pure blue that can be entirely used up. Another point against it is that it decomposes in the presence of acids.

As a test for ultramarine blue, set aside bluing in a glass to stand awhile. The particles will settle on the bottom, if the bluing is of this type.

58. Prussian blue is the name for the liquid blue that was first made in Berlin. Practically all of the liquid bluings that are so popular for home laundries are made from Prussian blue. This form of bluing gives a bright, clear greenish-blue and becomes entirely dissolved in the rinse water. Although it is very inexpensive, it is sometimes a detriment to the clothes. The great danger in its use becomes apparent when clothes are not properly rinsed and the blue comes in contact with soap. Then, when the clothes are ironed, the salts of iron, in the presence of the alkali in the soap, become decomposed and are turned to iron-rust by the heat from the iron. Another disadvantage is that when the clothes are allowed to stand long in the sun, Prussian blue disintegrates.

To test for this kind of bluing, heat a little with a strong solution of washing soda or after adding strong soap-suds to it; then if it turns from blue to a yellow or a yellowish-red, there is iron present.

59. Although **aniline blue,** a by-product of coal tar, is unknown to the majority of housewives, it is the form of bluing most used in commercial laundries. The color it gives can be either a blue-blue or a purple-blue. Since it is soluble, there is no waste, and since it contains no iron, there can be no danger of its causing iron-rust stains. The one caution that need be taken in its use is to use it weak enough. A little is a powerful dye and goes more than a long way, so if too much is used it cannot be easily bleached out.

60. Starch.—To give body to certain fabrics and garments, the process of starching is added to laundry work. For this purpose, there are four kinds of starch in use, each giving a different degree of stiffness and each having its own particular use.

Rice starch, or the liquid in which rice is boiled, is the mildest form. It is especially adapted for use on lingerie and baby clothes, but because it is expensive and difficult to obtain in quantities, it is seldom used except on rare laces or some other treasure that must be laundered and preserved with great care. The finish it gives is a beautiful gloss and softness that make a garment look like new.

Wheat starch makes a paste that penetrates clothing fibers and resists moisture a little more than does rice starch. Where different kinds of starch are used for different purposes, wheat starch is used on body clothes.

Where a very stiff starch is desired, as for collars, cuffs, and shirt bosoms, **corn starch** is chosen. This is the cheapest, as well as the most viscous, starch on the market.

Other stiffening agents are discussed in Arts. **86** and **87,** in connection with the laundering of white clothes.

61. Perhaps the most acceptable for general household purposes is a **mixed,** or **blended, starch.** This may be bought already prepared, as most housewives generally prefer, or it may be mixed at home. For a stiff starch, the proportion is two-thirds corn starch to one-third wheat starch, the corn starch furnishing the resisting power and the wheat starch, the pliability. For a more pliable starch, the ratio is two-thirds wheat starch to one-third corn starch.

62. Acids and Alkalis.—In laundering or cleaning materials, acids and alkalis have important rôles to play. Yet both must be used with great care and in weak solution or they will destroy the fibers of the material. Also, they must be rinsed thoroughly out of the fabric. Another point to remember about acids and alkalis is that they neutralize each other.

63. Some acids remove color, while others set color. Consequently, some acids, such as oxalic acid and citric acid, which is not so strong as oxalic acid, are bleaches and stain removers, while other acids, such as acetic acid, which is found in vinegar, will make the color firmer than before. Another point to realize is that acids may be used only on materials made of vegetable fibers, and usually on white clothes only.

A table telling just what acids affect the various stains and colors, and how to use them, is given in the Section on *Dry Cleaning*.

64. Alkalis comprise such cleaning agents as lye, washing powders, soaps, soda, borax, and ammonia water. Their work is that of loosening the grease and soil from garments and softening the water.

Nearly all alkalis may be used successfully on materials composed of vegetable fibers, but this is not the case with silks and wools, which come from animal fibers. For use on these, only the mild alkalis, such as white soap, ammonia water (except on white silk), and borax, can be used with safety. Soda is injurious to silk, wool, and colors.

Table I in Chapter II shows the ways of using alkalis as stain removers. Also, further instruction is given concerning the use of the alkalis that are essential in the usual washing processes.

65. Softening Water.—Some water is hard because of containing large quantities of carbonates or sulphates, and cannot be used effectively as a cleaning agent. Therefore, it must be softened so that it will combine readily with the soap to make "live" suds that will cut the grease and release the dirt in garments. Unless the water is softened, the hard elements will combine with the soap and make a greasy scum that will settle on the clothes and on the sides of the tub, boiler, or other utensils.

There are a number of methods of softening water, including the use of washing soda, borax, and ammonia. Following are the directions for their use:

66. *To soften water with washing soda,* dissolve 1 pound of soda in 1 quart of water, using 1 tablespoonful in 1 gallon of soapy water. Add sufficient water to soak the clothes.

When washing soda is used, great care is required to have it thoroughly dissolved, as the soda will weaken threads and cause holes in the clothes if it comes in direct contact with them. Also, it is hard on silk, wool, and colors.

67. *To soften water with borax,* use 1 to 1½ teaspoonfuls of borax to each gallon of water. Borax acts also as a mild bleach and has some virtue as a germ killer. It is less dangerous to silk, wool, and colored fabrics than washing soda.

68. *To soften water with ammonia,* consider first the kind of ammonia, for the strength determines the amount of water to be used. For ordinary use, the so-called "household" ammonia, procurable at grocery stores, is satisfactory. It is also handy, for it does not have to be diluted. The best grades of bottled household ammonia are cloudy.

Some persons prefer the concentrated ammonia purchased at drug stores. This may be diluted five to ten times its original volume, and will prove an economy, but the bottle in which it is kept must be tightly stoppered, as ammonia will lose its strength. When diluting ammonia, keep your face either below or turned away from the strangling fumes.

Usually 3 tablespoonfuls of either diluted or "household" ammonia should be enough to soften 1 gallon of water.

THE LAUNDERING PROCESS

PROGRAM FOR LAUNDRY WORK

69. Laundry work may be done in a haphazard way and perchance turn out satisfactorily, but such a result must be considered more nearly a coincidence than a direct result. It cannot be relied on to happen every wash-day. Instead, it is the systematically done laundry work that can guarantee success. But this does not mean that superfluous time must be consumed in elaborate processes. The methods may be thorough and systematic and yet direct and expeditious.

70. Following is a program that has proved its worth as a guide through the various steps of laundry work. It is given first in outline form, and then in detail.

Monday:

1. Sort clothes.
2. Mend tears that will grow in washing.
3. Remove stains.
4. Soak soiled clothes.
5. Get equipment ready.

Tuesday:

1. Heat water.
2. Make soap solution.
3. Fill tub or washer and wash in succession (changing suds when necessary):
   Table linen
   Bed linen
   Towels
   Body linen
   Handkerchiefs
   Soaked clothes

4. Boil by putting clothes in cold water and letting them slowly come to boiling point.
5. Make starch.
6. Look over articles, especially if a washer has been used, to see whether further rubbing is necessary.
7. Rinse in 2 or 3 waters.
8. Blue, dipping and wringing each piece separately.
9. Starch clothes needing average stiffness, changing starch as often as necessary.
10. Hang out pieces.
11. Wash colored clothes, setting color, washing, rinsing 2 or 3 times, starching; and hang out to dry.
12. Wash cotton stockings, rinse, and hang to dry.
13. Take down clothes, piece by piece, fold and lay in the basket.
14. Dampen and roll up.
15. Wash any silk underwear, embroidery pieces, or colored clothes that must be ironed immediately, and iron. Also, wash flannels and wool or silk stockings.

Wednesday:

1. Do heavy starching.
2. Step No. 15, under Tuesday, may be left until now, if desired.
3. Iron.
4. Air.
5. Put away.

SORTING THE CLOTHES

71. In laundering, it is necessary first to sort the clothes, as different handling is required for white and colored garments and for cotton, linen, wool, and silk. A good classification to use in sorting is as follows: Table linen, kitchen linen, bed linen, body linen, colored clothes, flannels, silks, and hosiery.

72. At the very first, the articles to be washed should be examined carefully, so that fancy buttons or, in fact, any trimming that would be harmed by water may be removed. Stitches holding drapery or linings should be loosened to simplify cleansing and ironing. Also, during the sorting of clothes, attention should be given to garments containing pockets. Turn the pockets inside out and brush thoroughly to remove any particles of dust that may have collected.

73. The white pieces of cotton or linen may be laundered with ordinary precautions, but silk and wool garments and colored clothes require particular attention. A difference in handling is necessary because cotton and linen are made of vegetable fibers whereas silk and wool are composed of animal fibers, and animal fibers are more susceptible to injury from strong light or heat than are vegetable fibers.

While the clothes are being sorted, look them over carefully for stains and spots, and see that these are removed before the garments are washed, as removing stains at this time saves an extra handling and prevents the stain from being transferred to other garments. The subject of stain removing, or "spotting," is treated in the Section on *Dry Cleaning.*

WASHING WHITE COTTONS AND LINENS

74. Soaking.—It is advisable to soak white clothes for a few hours (some prefer over night), for soaking loosens the dirt, makes less rubbing necessary, and therefore saves both time and wear. A very simple way to soak white clothes is to cover them with warm water early in the morning. Then, when one is ready to go on with the washing, more hot water may be added to that already used and the clothes may be washed easily.

If clothes are to be soaked over night, use cold water rather than warm, because warm water expands the fibers of the fabric, brings the dirt to the surface, and then, during the night, cools and closes the fibers so that by morning the dirt is held very tightly in the fabric and is difficult to loosen again.

When clothes are soaked over night, soap the very soiled parts as they are put into the tub. Some persons roll the soaped articles, this plan being very satisfactory although it takes more time.

If you have only hard water to use, treat it by one of the methods suggested in Arts. **66, 67,** and **68** before you attempt to soak clothes in it. Otherwise, a scum will form and settle on the clothes. Soap, of course, helps to prevent the forming of the scum.

75. Washing.—After soaking the clothes, put them into a tub half full of hot, soapy water and rub them on a washboard, or, if you have a washing machine, put them in that. In either case, when the soap has been "killed" by a quantity of clothes passing through the suds and the water is cold, change to warm, fresh suds.

No suds and cold water make lifeless, heavy laundry; therefore, rejuvenate by new, hot suds. The results repay many times for the effort.

If a washboard is used, do not rub too vigorously, as this may injure the fabric. The idea is to force the suds through the clothes and thus carry the dirt away. Consequently, the portions being rubbed should be dipped almost constantly in the suds, so that there will be no rubbing of the material after the water has been squeezed out. For very coarse goods, a hand brush will prove helpful. Another point to remember is that the soiled parts of the clothes should be rubbed on one side and then turned and rubbed on the other side. Rubbing with the palm of the hand will save the skin on the knuckles.

76. *If a washing machine is used*, the book of directions that pertain to that particular washer should be carefully studied. Nearly every machine has a water line marked on it to indicate the maximum amount of water permissible. The number of garments may be such that, when pressed down, they will be an inch below this water level. Never fill a washer too full, not only because the mechanism will be injured, but also because the free movement of the clothes will be hindered.

77. The *amount of soap* must be determined by the hardness of the water, and can be gauged almost exactly by each housewife. By weighing the clothes each wash-day and trying out different amounts of soap, she can determine how much is necessary to make suds that will "hold" up during the washing and yet not be so heavy as to adhere to the fibers of the materials and make the removing of the dirt more difficult. Of course, the soap should be liquid to obtain the best results, either the soap chips or the soap jelly discussed in Art. **52** being satisfactory.

78. Boiling.—If white cotton or linen clothes are very much soiled or if it seems desirable to sterilize them, they may be boiled. After first washing in hot water, therefore, wring the clothes, rub the soiled spots carefully with white soap, and place in a boiler containing cold water. Put a few soap chips or a little soap jelly into each boiler full of clothes, and heat the water gradually. Use a clothes-stick to keep the clothes stirred and pressed down. After the water has begun to boil, allow the clothes to remain in it about five minutes. Boiling for a longer time tends to turn fabrics yellow.

If the garments are very soiled, from 1 to 4 tablespoonfuls of kerosene may be put into the water when boiling to aid in cleansing. Thorough rinsing is required in such case to remove all traces of the kerosene.

Another helpful fact to know is that the carefully strained juice of one or two lemons added to a boiler of clothes will help to whiten them.

79. Rinsing.—After taking clothes from soapy water, very careful rinsing is essential. It is advisable to rinse in clear hot water, but this is not always practical, as usually lukewarm water is more easily provided. In either case, shake out each piece carefully to remove all soap. Repeat the rinsing process at least twice, and preferably three times, because the removal of the soapy water has much to do with the efficiency of cleansing and the freshness of the clothes when dry. An ideal way is to have the first rinse water hot and the successive rinse waters gradually grow colder so as to prepare the clothes for the bluing. All soap must be removed by these rinsings; otherwise the clothes will be spotted when the bluing comes in contact with the alkali of the soap.

Do not use washing soda to soften the rinse water, as it is too strong to be left in the fabric. A little borax may be used in the first and second rinse waters; but, after the soap has been removed, there is no need for a water softener, for it is only in the presence of soap that a scum is formed.

80. Bluing.—Since the bluing process is resorted to for the purpose of covering up yellowness, it is not necessary for new clothes. But bluing white clothes that are no longer new is an important item of good laundering. Just how much bluing is required must be determined by each housewife as she takes into account the kind of bluing and the nature of the articles to be blued. For example, open-mesh fabrics and table linens take up bluing more quickly than do materials of a firmer weave.

At all times, great care must be taken not to have the blue water too dark or to leave the articles in it too long, for too much bluing acts as a handicap, making the clothes gray rather than white. If it does happen that clothes become overblued, they may be whitened by placing them in cold water and heating them to the boiling point, repeating the process if necessary until all excess bluing is removed.

81. If you are one of the housewives who use powdered or lump blue, then be sure to take great care to add a small amount of water to the powdered blue before use and to tie ball, or lump, blue in small cloth bags, which may be dipped and squeezed in the water before using. Otherwise, the blue is likely to be unevenly distributed and cause spots to form on the clothes. In spite of these precautions, there will be this tendency unless a very few clothes are put in at one time and these kept in motion.

If you use the liquid Prussian blue, remember that it contains salts of iron that turn to iron-rust in the presence of the alkali from soap, particularly when heat is applied, as in ironing, for example. Consequently, to avoid iron-rust stains on the material, take every care to have the clothes thoroughly rinsed so that all traces of soap are removed before bluing.

82. No matter what kind of bluing is used, the following cautions should be observed:

Use a small amount of bluing in a large amount of water.

Keep it stirred well.

Shake the clothes thoroughly before they are put into it.

Do not allow clothes to remain in the water too long; unless clothes are very yellow, sousing them up and down two or three times should give them enough bluing.

A helpful point to know about the use of bluing is that $\frac{1}{4}$ to $\frac{1}{2}$ cupful of skimmed milk added to the bluing water helps to prevent the bluing from streaking clothes.

83. Starching.—Starching clothes means dipping them in a stiffening agent to give them body and a dressing similar to that in new material, and also to aid in keeping them clean. When it is desirable, this is done after rinsing and bluing. The stiffer you want the article, the more thoroughly you must wring the rinse or bluing water from it, and the less thoroughly you must wring the stiffening agent from it.

The stiffening agent to use and the amount needed vary according to the kind of fabric and the stiffness desired. Also, the number of pieces to be put through the starch must be considered.

Of the kinds of stiffening available, discussion has been given in Arts. **60** and **61**. In order to become efficacious, these stiffening agents require preparation according to stated formulas or recipes, making a further division, that of the cooked and uncooked varieties, necessary.

84. For general laundry purposes, *cooked starch* is the customary standby. Following is a general recipe for cooked starch, which may be varied to suit one's needs.

1 to 4 tablespoonfuls starch
1 cupful cold water
1 quart boiling water
$\frac{1}{2}$ teaspoonful paraffin or lard

Blend the starch and cold water to a smooth paste, and then gradually pour in the boiling water. Add the paraffin or lard next. Boil the mixture until clear, stirring constantly, generally for 5 to 10 minutes. Strain while hot. If $\frac{1}{2}$ teaspoonful of borax is added with the paraffin or lard, it will help to whiten the clothes and also make the starch smoother.

For a stiff dressing, the starch should be made very heavy; that is, more starch should be used in the mixture. When cooled enough to handle, such starch should be like a very soft jelly.

85. *Uncooked* or *cold starch* also has its place in laundry work, although, because of the difficulty in ironing garments starched in this way, it is wiser to use a stiff cooked dressing, which produces practically the same results.

There are various brands of commercial starch to use for cold starching. Such starches are simply blended with cold water and are generally used for collar bands and cuffs, or wherever a firm, stiff finish is desired.

86. *Borax dressing* is used to stiffen laces, fine voiles, or organdies. A solution of borax made with 1 teaspoonful of borax to 1 quart of hot water is very satisfactory.

Garments stiffened by borax must be ironed before they have dried, as the dressing is not heavy enough to warrant the dilution caused by sprinkling.

87. *Gum arabic* makes a good stiffening agent for crisp lawns and organdies, particularly in dark colors. It may be purchased in powdered or lump form, but if possible the powder should be procured. Let 1 or $1\frac{1}{2}$ tablespoonfuls stand in a quart of hot water until dissolved. Strain the solution and, when needed, use $\frac{1}{4}$ cupful to 1 quart of water for average stiffness.

In using this dressing, allow the garment to dry after washing and then wet it thoroughly with the gum-arabic solution. Allow it to dry again and then dampen for ironing. Roll the garment treated with the gum arabic firmly in a towel, and after it has stood 15 to 30 minutes, iron as you would iron a starched garment.

88. *Rice water* forms another medium for stiffening laces. To prepare this dressing, wash 2 tablespoonfuls of rice until it is perfectly clean, and put it in a saucepan with 1½ pints of water. Boil 4 minutes, strain, and then allow the lace to stand in this water for a minute or two. Iron the lace from the wrong side while damp, placing a damp cloth over it at first.

89. In the *process of stiffening*, the following precautions should be noted:

The hotter the starch is, the less danger there is of its sticking.

Turn the garments wrong side out before dipping them into the solution and hang them on the line in this way.

Wring out as dry as possible from the rinse or bluing water all garments that are desired to be very stiff, and be sure that these are the first things to be dipped into the starch.

Put white clothes into the starch while it is very hot.

In starching a garment or part of a garment with heavy starch, dry the garment first and then starch it. Rub the starch in thoroughly until every part of the material, even though there are several thicknesses, has taken up enough to be wet. Then stretch the surface, smooth it, and wipe off all shining starch with a soft, damp cloth. The garment is then ready for finishing with a hot iron.

90. Hanging Clothes to Dry.—To some it might seem that the laundry work is practically done when clothes are ready to be hung on the line; but the next step has some very important features, the oversight of which might make necessary the rewashing of articles.

One of the chief virtues of proper drying of clothes is the effect that sun and air have on them. When clothes are hung on the line quite wet, almost dripping in fact, the combined action of sun and air is one of the best bleaches known. It is because of this that white clothes should be hung, when possible, out-of-doors, and that colored clothes should be hung in the shade or indoors.

91. To save time in the sorting of articles for ironing, hang all garments of a kind together. Then, to have the clothes dry in the best possible condition, keep in mind the following *general directions:*

Be sure that the clothes-line and pins are perfectly clean.

Shake things out well and turn outer garments, if they have not already been turned, wrong side out.

Hang large pieces, such as sheets and table-cloths, on a straight thread of the material, one-fourth or one-half of each over the line, and fasten with four or five clothes-pins. Sheets may be doubled crosswise, so that the upper and lower hems meet, and pinned to the line by the hems, to minimize the danger of hems being torn by the wind.

Fold flat pieces as they are taken off the line, as then they will be easier to iron.

Take starched clothes from the line as soon as they are dry, as long hanging will cause them to lose their stiffness and make them more difficult to iron. Also, as a brisk wind will take out the starch, be sure to make it rather heavy on windy days.

92. Authorities differ as to the proper method of *hanging dresses and blouses* on the clothes-line. If there is plenty of room, garments may be hung lengthwise; that is, held to the line by clothes-pins at the shoulder, the waist line, and the hem. A garment will dry more quickly, however, if hung by the hem, and, if the position on the line is changed at least once, there will not be much danger of stretching. Circular skirts, or flared effects, will sag if this is done, but most wash frocks are cut on comparatively straight lines so this need not be considered.

Very sheer dresses may be placed over a hanger that has first been wound and padded with a strip of clean old muslin or Turkish toweling. The hanger may be hung over the line and held fast by a clothes-pin. If possible, always dry delicate materials in the shade, but if no shade is available, hang the garment inside where there is a free circulation of air.

93. In *freezing weather*, wash the clothes-line and pins with strong salt water and do not rinse it off. The salt will prevent the clothes from freezing to the line.

Another way in which to add to the comfort of winter laundry work is the following: Place a large hook on each of two posts or trees a convenient distance apart. Prepare a length of clothes-line rope just long enough to extend from one to the other of these with a loop at each end. While you are still in the house, pin this loose, short length of rope full of small articles, such as handkerchiefs, stockings, etc., and place it on top of the basket of clothes. It may be hung on the two hooks very quickly without making the hands cold.

To keep the clothes in the basket from freezing before they are hung up in winter, fill a metal hot-water bottle with very hot water and place this on top of the basket. As the clothes begin to freeze, push the bottle from place to place. This will warm the hands as well as stop the freezing.

A small-sized rubber hot-water bottle carried in the clothes-pin bag will add greatly to the comfort of winter laundry work.

WASHING COLORED CLOTHES

94. Setting Colors.—There is considerable controversy on the subject of color setting. Some authorities claim that if color is not set by the manufacturers when fabrics are released from the factory, no amount of processing in the home can fix the dyes. Others, however, think that much can be done by the home woman to help fix as well as preserve the original color of her garments. Consequently, because of the uncertainty as to whether colors are or are not guaranteed "fast," as are, for instance, Everfast fabrics and Indian Head, the careful housewife will give colored clothes particular attention in laundering.

Following are recipes for solutions that prove very effective for some colors. In every case, after setting the color in garments and before washing them, dry the garments thoroughly. Also, take care to use lukewarm water instead of hot water and to use the minimum amount of soap chips or jelly, remembering that hot water and much rubbing with soap will make colors "bleed." Another point that it is well to know is that if the fabrics are plain colors, a color rinse may be used in the same way as bluing is used. Also, vinegar added to the rinse water brightens faded colors.

95. For colored fabrics, especially for pink, brown, or black, a general recipe is to use *common salt solution*. For this, 1 cupful of salt to 1 gallon of water is a satisfactory proportion. The material should, if possible, be left to soak in this solution over night and then dried before washing. It is advisable to put the material through this process each time it is laundered, as the salt does not have a lasting effect.

Despite the fact that a great many authorities approve of this recipe for setting colors, it is well to know that there are some who claim that it hinders the work of cleaning, since to put salt in the water makes it hard. They recommend washing with the water at a low temperature, about 98° F., using fine soaps or soap flakes, and not using any salt unless the color starts to bleed or gives evidence that it will.

96. A *sugar-of-lead solution* is generally recommended for delicate colors, especially lavender, yellow, and light green, but it proves effective also for many darker colors, such as red.

To make this color-setting solution, follow the proportion of 1 ounce of sugar of lead to 1 gallon of boiling water. Try to dissolve every particle of the sugar of lead, but should any insoluble substance remain, strain the solution in order to prevent the formation of streaks in the material, which may be impossible to remove. Wait until the solution is cold before placing the material in it; also, let the material remain there for 2 or 3 hours before rinsing it.

Sugar of lead is poisonous if taken internally, so extreme care must be exercised in handling it.

97. An *alum solution* is considered effective for green, blue, or mauve. To make it, follow the proportions of 1 tablespoonful of alum to 1 gallon of water.

98. A *vinegar solution* usually proves satisfactory for pink, mauve, and blue. In making such a solution, follow the proportion of 1 cupful of vinegar to 1 gallon of water.

99. *Alum* and *salt*, in the proportion of 1 cupful of salt and 1 tablespoonful of alum to each gallon of water, form a solution that is efficacious in the setting of brown, gray, and pink.

100. *Alum, salt, vinegar*, and *sugar of lead* are used in combination for setting the color in plaids, checks, and figured goods. Use ½ cupful of vinegar, 1 cupful of salt, 1 tablespoonful of alum, and 1 tablespoonful of sugar of lead for each gallon of water.

101. *Salt* and *vinegar* also make a practicable combination. Into 1 gallon of water, put 1 cupful of salt and ½ cupful of vinegar. Bring to a boil. Plunge the article into the boiling water and boil a few minutes. Do not wet the garment before putting it in. Colors set in this way should not run.

102. *Ox gall*, 1 tablespoonful to each gallon of water, is used in setting red.

103. General Directions for Washing Colored Clothes. Colored clothes should not be soaked before washing. Use lukewarm water, even cold water for pale colors, and mild soap flakes or soap jelly, and avoid vigorous rubbing. It will be found that squeezing the clothes with the hands in the soapy water will remove the usual soil, except perhaps at the neck line or cuffs. Gentle rubbing may be employed at these places.

If the garment appears clean after this treatment, the rinsing process should be begun. Do not twist the garment in the hands to remove water, but rather squeeze it. A wringer is not always practical either, because it may press the colors into each other. As much of the soapy water as possible should be pressed out before placing the article in the first rinse water, which should be of practically the same temperature as the first solution.

The tub should be well filled so that the clear water may penetrate every part of the garment. At least three rinsings are required for colored clothes. The last water should be clear after the garment is removed from it.

104. Of course, colored fabrics should never be boiled, no matter how soiled they are. In the case of heavy overalls, mechanics' suits, or in fact any garments soiled from the grease of machinery, or otherwise badly spotted, they should be washed first in gasoline to release the dirt held by the oil, and then with soap chips and very hot water to cleanse them thoroughly.

105. Starching Colored Clothes.—The starch for colored clothes should be no warmer than lukewarm, as hot starch may affect the color. If the starch is tinted according to the color of the fabric, it will tend to preserve the bright color in the material. Tea or coffee may be added for black or brown, bluing for blue, and red ink for pink or red, or tinting powders in colors to match the fabric may be used. It is also possible to purchase mourning starch for dark fabrics.

In using such solutions, be careful that the color is not too deep. If possible, test it first on a sample of the material.

106. Drying Colored Clothes.—Never hang colored clothes in the sun; always hang them in the shade. If possible, select a windy day for washing printed fabrics that have a constrasting ground, for they will dry more quickly, and the less time given to the operation, the less chance there is that the colors will run into the background.

It is not safe to wring any fabric having a design; rather lay it between towels and take up the moisture with them until the garment no longer drips. Then complete the drying in the shade and wind. In cold weather, guard against freezing, for much damage can be done to color and design by freezing.

IRONING

107. Dampening.—The next step in the laundering process is to sprinkle the clothes to make them ready for ironing. Usually this is done on a table after the clothes have been brought in from the line. Some housewives find that spraying them with a garden hose while they are still on the line is a time-saving plan. However, this is possible only in favorable weather.

It is important that clothes be dampened evenly and not made too wet. An excellent device for simplifying the sprinkling process and making it less irksome is a finely pierced aluminum or tin sprinkler, as mentioned in Art. **49**. Some housewives prefer to use a clean whisk broom, which is kept for the purpose. Either of these methods is preferable to that of dipping the fingers in water.

In sprinkling starched things, especially, one should avoid too much moisture, for when the garment is tightly rolled and allowed to stand for several hours it usually becomes damp enough. Silk should never be sprinkled, but should be pressed dry or ironed while still wet. Sprinkling causes it to spot. Linens may be dampened more than cottons; in fact, they must be quite wet to give a glossy finish in ironing.

108. After sprinkling, roll up each garment as tightly as possible, place all close together in the basket, and cover with a Turkish towel to keep the outer portions from drying out. In folding, lay all trimming, hems, collars, and cuffs inside, because they require more moisture than the rest of the garment, and, if left exposed, they are likely to dry quickly. Also, remember that time can be saved in the ironing process if care has been taken in the folding; for example, if sheets and table-cloths have been folded so that their edges meet and the folds are according to whatever method of folding you prefer, the ironing of them will be very simple.

109. After dampening, allow white clothes to stand from 4 to 10 hours, usually over night. If in case of an emergency they must be ironed immediately, use hot water for dampening them. Or, if borax has been used as stiffening, iron the garments before they have dried on the line. Another point to remember about white clothes is that if left too long, they may dry out or, in warm weather, they may become mildewed.

It is not advisable to dampen colored clothes any length of time before ironing, for their colors might run. The ideal way is to take them from the line before they are too dry and iron them at once. If this cannot be done, dampen them with warm water about 15 to 20 minutes before ironing.

110. Cautions Concerning the Iron.—To iron easily, be sure to have the iron hot enough. Try it on a folded cloth or paper or touch it with a moistened finger. If you use the former method, the cloth or paper should not show scorch. If you use the latter method, the iron should sizzle if the temperature is right.

It is always well to keep a piece of beeswax or paraffin to rub on the iron to prevent its sticking, but more stringent means may be necessary to keep the surface smooth. If so, one of the following should fit the circumstances:

Saturate a cloth with water, wring it partly dry, and rub soap thoroughly on it. Place it on several thicknesses of paper and pass the iron over it several times, pressing hard to remove starch and roughness. The result is surprising, as it makes the surface of the iron perfectly smooth and clean.

If an iron becomes rusty or rough on its under surface, it may be cleaned and smoothed by sprinkling coarse salt on a board or tin and rubbing the hot iron over it repeatedly until the rust and the roughness have disappeared. Also, fine steel wool or fine sandpaper can be used with excellent results. To secure a more polished surface and to prevent starch from sticking, heat the iron, touch it to a block of paraffin, and rub it back and forth over clean paper, as in ironing, until its surface is smooth and polished.

111. Ironing Flat Pieces.—Iron with the thread of the material and do not iron so quickly that the surface is not dried, as this will cause the material to blister afterwards.

Iron cottons and linens on the right side except where there is embroidery work, beading, buttons, or other fasteners. Such a surface should be laid on a thick, soft towel or blanket so that the embroidery work or fasteners will be pressed down into the padded surface, and then ironed on the wrong side. This causes embroidery to stand out well and protects the fasteners.

Linen table-cloths have the best finish when ironed on the right side, and, as in the case of all linens, should be very damp and ironed with a hot iron to get the best results.

112. Ironing Garments.—The general rule is to iron first the parts of garments that will hang off the board when the rest is being ironed. For example, in ironing a man's shirt or a blouse, iron the collar and cuffs first, then the sleeves, then the back, and finally the front. The plan of ironing the fronts of such garments last helps to produce a better appearance in the finished work. Brush the garment with a damp cloth if it becomes dry while ironing.

113. In ironing dresses, do the work as rapidly but as evenly as possible, following the straight, lengthwise threads of the material. The cuffs, sleeves, and trimming features should receive attention first; the waist, next; and the skirt, last. Use a moderately hot iron and firm pressure so that the material will be perfectly smooth and free from creases. Press the garment until it is quite dry, giving particular attention to the waist line and seams, for if there is any dampness at these places, the material will wrinkle again while drying.

A well-dampened, clean cloth is very convenient for dampening spots that may become too dry. Also, it is a worth-while precaution to go over the entire garment the second time. As final pressing can be done more rapidly, it will add just the required finished look. Then too, after ironing, one may hold the garment up and look it over to be sure that there are no parts that require further attention.

114. Further hints that will prove helpful in the ironing of garments follow.

Very fine gathers, as in organdies or any sheer cotton, will look like new if, after being ironed, they are stroked with a needle as in sewing.

When ironing a petticoat or drawers with ruffles or flounce, iron the ruffle or flounce first. If there is an under, or dust, ruffle, on the petticoat, iron this under ruffle first. Hold the ruffles straight on the hem edge, and iron up into the gathers. Press the skirt with the lengthwise thread of the material. Ironing crosswise makes the skirt sag and wrinkle at the seams. Tucks should be pulled taut and ironed lengthwise.

Because silk is extremely sensitive to damp heat, the iron employed on moist silk things should be carefully tested. Some dry silks may be smoothed with a comparatively hot iron.

Garments made from black sateen should be ironed on the wrong side, the same method as is used for silk being employed.

Too hot an iron must not be used on colors that have a tendency to run, for the intense heat makes the colors bleed.

115. Ironing Embroidery Pieces.—The majority of embroidery pieces should be ironed perfectly flat, as a flat, unbroken surface adds much to their beauty. They should be ironed with the thread of the material and slowly enough so that the entire surface is dried. Then they will not blister. Of course, the pieces should be quite wet and the designs should be ironed into an embroidery pad or Turkish towel.

It is possible to pin, instead of iron, embroidery, and in many cases the results are better. The heavy embroidery dries under tension rather than pressure, and this allows it to cushion rather than flatten. To use this method, pin the embroidery piece directly on the ironing board or padded table, or put the pins in strips that you have previously sewed around the edges, using the same method as is described in Art. **144** for curtains. If there is much background in a piece of embroidery that you are smoothing in this way, iron it as much as possible so as to give it the gloss that linen and many other fabrics require.

116. If embroidery pieces are not to be used immediately after laundering, lay them perfectly flat in a drawer where they will not be in danger of becoming wrinkled. Pieces too large to be cared for in this way should be rolled carefully over a paper roll. So that the material will not become soiled, always wrap a piece of paper or muslin around the roll before putting it away. Some housewives are proud possessors of centerpiece rolls of linene, crash, or some similar material.

Fig. 23 features a simply made, but effective, centerpiece roll with napkin container to match. Table-cloth containers may be provided, too, these being oblong and larger, so as to hold a table-cloth as it is usually folded.

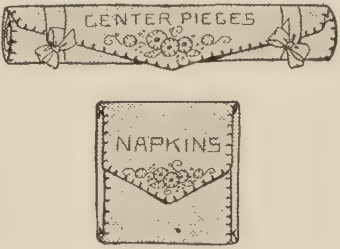


FIG. 23

Some persons prefer to repress all linens just previous to using them, as they think it makes the pieces appear fresher and more attractive. Especially do they press doilies and centerpieces that have been rolled.

117. Removing Spots and Excess Gloss.—Ugly spots sometimes result in the following way: If too much starch is used on a garment and it is ironed when too damp, some of the starch sticks to the iron. Then, as the iron continues to heat, this starch is turned to dextrin, which is brown. If this is left on the iron and the iron is used when moderately hot, or on a garment that is quite damp, the dextrin rubs off on the garment, forming a spot that resembles both scorch and iron rust. Fortunately, it can be washed out. But the easiest method is to prevent it by examining the iron carefully and washing off the scorched starch, or dextrin, when the iron is only slightly warm.

Scorch spots may sometimes be washed out, but if they are not entirely removed by washing, put the garment in the sun to bleach. Other methods of removing scorch are given in Table I, under *Dry Cleaning*.

If the garment is too glossy after ironing, rub a damp cloth over it very quickly and iron again. This treatment may be repeated if the gloss still remains.

118. Folding Clothes.—Much of the folding of clothes, particularly in the case of flat pieces, is done during the ironing process. If this step is treated as an important one, worthy of systematizing, it can save considerable time for the busy housewife. It is a matter of forming the habit of folding clothes the simplest way and with the creases in the best places. One general rule that can be applied to all articles is *to fold with the thread of the material.*

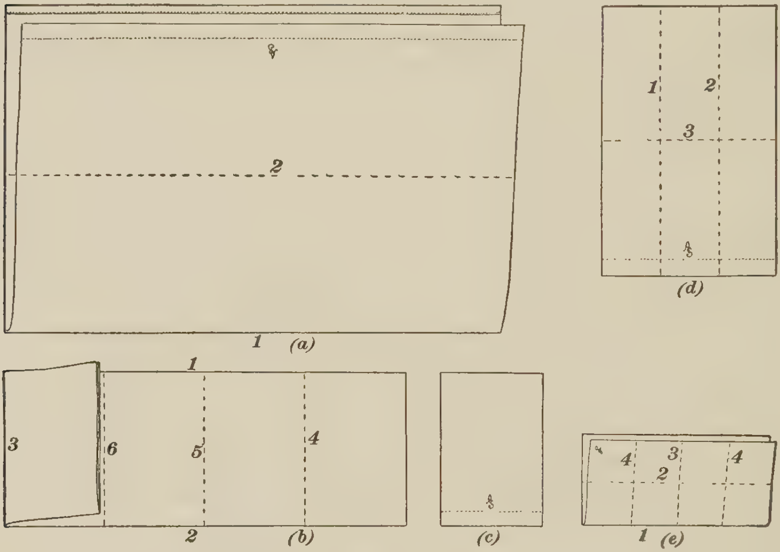
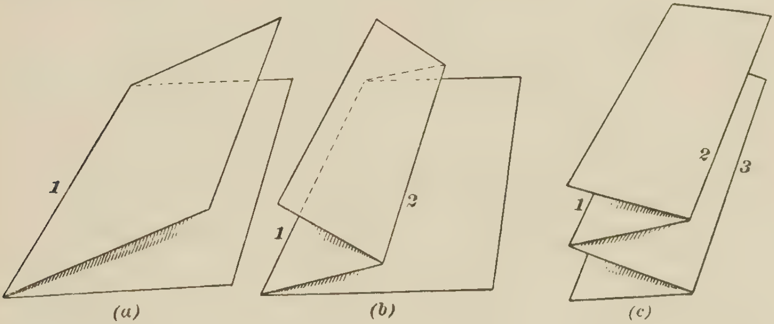


Fig. 24

119. Nearly all housewives employ the same method of folding *plain sheets.* This method is the simple way of making a lengthwise fold through the middle, another lengthwise fold through the middle of the two layers, a crosswise fold through the center, and a final crosswise fold through the layers that have been obtained by the previous foldings.

120. To fold a *monogrammed sheet* so as not to crease the monogram, first make a crosswise fold, as along the line marked *1*, Fig. 24 (*a*). It is well, in making this fold, to have the under edge drawn back about ½ inch; otherwise, in making the second fold, the under edge will be pushed out about that distance and cause the edges to be uneven. Now fold half-way between the first fold and the edges, as along the dotted line *2*, keeping the monogram on the outside. Then, after turning the folded sheet over so that the monogram is on the under side, make a vertical fold, as at *3* in (*b*), about one-fifth of the distance from side to side of the sheet. Make other folds along the dotted lines in the order shown by the numbers. The folded sheet will then appear as at (*c*) with the monogram in the center.

121. For *pillow cases* and *towels*, the accepted method of folding is shown in Fig. 24 (*d*). Make the first fold as along the dotted line marked *1*, away from you, and the second fold along the line marked *2*. Then, make a crosswise fold at *3* and turn this also away from you, when the process will be completed and the monogram will be on the outside.



(*a*) (*b*) (*c*)

FIG. 25

122. The approved method of folding *napkins* is illustrated in Fig. 24 (*e*). Be careful to follow the various steps in the order indicated, always keeping the monogram on the outside.

123. The folding of *table-cloths* varies considerably, depending on the size and shape of the linen and the position of monograms. But an important point to remember in whatever method is followed is that too much creasing destroys the beauty of a table-cloth.

The most common method of folding a table-cloth is the method described in Art. **119** for folding a plain sheet, but there are ways of folding so as to lessen the number of creases.

124. In Figs. 25 and 26 are shown two methods of folding so that there are only three lengthwise creases. If the table-cloth cannot be put away conveniently in either shape, a soft, unpressed crosswise fold may be made.

In detail, the method of folding in Fig. 25 is as follows: First, fold the cloth in half lengthwise, as along the line marked *1* in (*a*). Next, divide the upper of the two resulting sections in half along the line marked *2* in (*b*), folding one of these halves back on the other. Then turn the cloth over and divide the lower section in the same way along the line marked *3* in (*c*), folding one portion back on the other in the direction opposite from that of the fold at *2*. This method makes the two outside lengthwise creases alike.

The method shown in Fig. 26 in detail is this: Divide the tablecloth in half lengthwise and crease. Then open out and bring one selvage, or lengthwise edge, of the cloth over to this crease, folding along the line *1* in (*a*). Fold the remaining half along the line at *2*, bringing the other selvage, or lengthwise edge, to the creased center line. As a last step, fold along the center line, as at *3* in (*b*), bringing the folded sections together in the position shown. This method makes all three lengthwise creases alike.

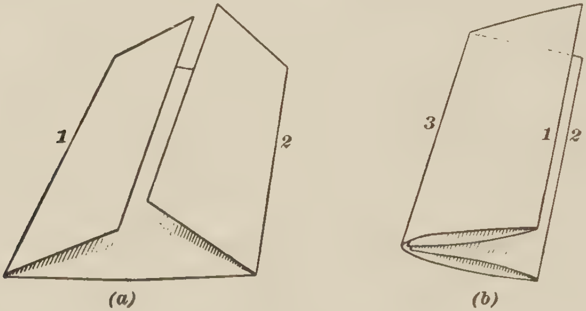


FIG. 26

125. In *ironing undergarments*, avoid all unnecessary creases and yet fold the garments so that they may be placed conveniently in a drawer. Fig. 27 indicates the manner of folding the ordinary articles of woman's underwear.

To fold the *nightgown* shown at the upper left of the illustration, with the front next to the board, first make a lengthwise fold from shoulder to hem, as along the dotted line *1* in (*a*), turning the fold toward the back of the garment. Next, fold back an equal portion of the garment on the opposite side, as along the line marked *2*.

Then turn upward, toward the back of the garment, the lower third of the gown, as along the line at *3*. As a last step, fold the upper third of the gown back so that it covers the lower third, which, as

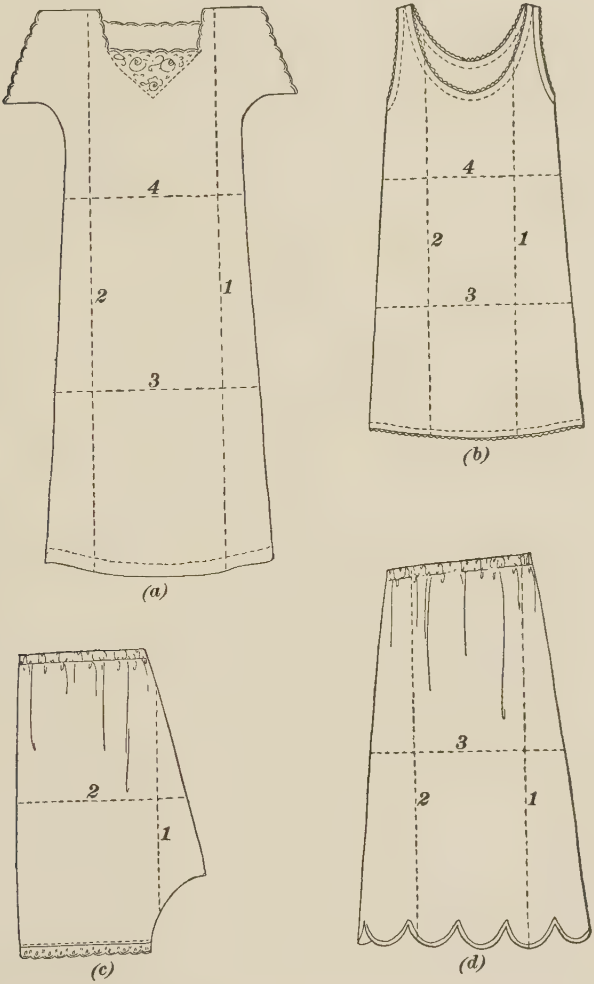


Fig. 27

just explained, has been turned upward. If these directions are followed, the upper front section of the nightgown will be exposed. Put away with this side uppermost.

126. To fold a *chemise* or *combination*, follow the method just explained for folding a nightgown. The process is indicated in detail by the dotted lines and figures in (*b*), Fig. 27.

127. The method of folding a pair of *drawers* or *pajama drawers* is illustrated in (*c*), Fig. 27. In this view, the drawers are shown with the legs together. Place them in this position on the board, and make a lengthwise fold along the dotted line *1*. Next, make a crosswise fold along the dotted line *2*, just midway between the upper and lower edges of the drawers. Be sure, in making this fold, to turn it in such direction that the section, which has already been folded over, will be covered. Pajama drawers need another crosswise fold.

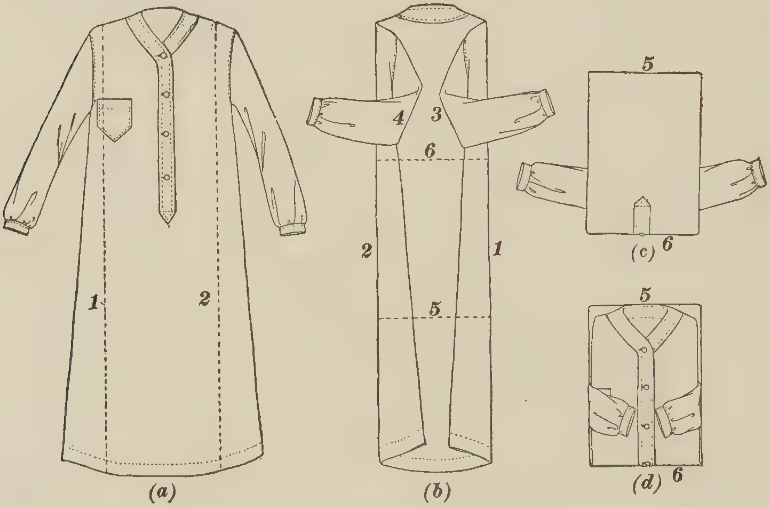


FIG. 28

Fold *step-ins* and *bloomers* once lengthwise and once crosswise. Often these are of such soft silks that it is not practical to try to fold them precisely.

128. To fold an *underskirt*, first place it in the position shown at (*d*), Fig. 27. Now make a lengthwise fold, from waist line to hem, along the dotted line *1*. Next, make a similar fold on the opposite side of the garment along the line *2*, turning this fold in the same direction as the first one. As a third and final step, make a crosswise fold along the dotted line *3*, midway between the waist line and hem. Turn this fold in the direction of the other two, leaving the section between the dotted lines *1*, *2*, and *3* exposed. Put away this section on top.

129. The simplest way of folding a *man's nightshirt* is shown in Fig. 28. Lay the nightshirt lengthwise on the board, and make two lengthwise folds as at *1* and *2*, view (*a*). Then fold the sleeves back as at *3* and *4*, view (*b*). The next two turns, *5* and *6*, will bring the nightshirt into the position shown in (*c*), and folding the sleeves over to the front will result in the form shown in (*d*).

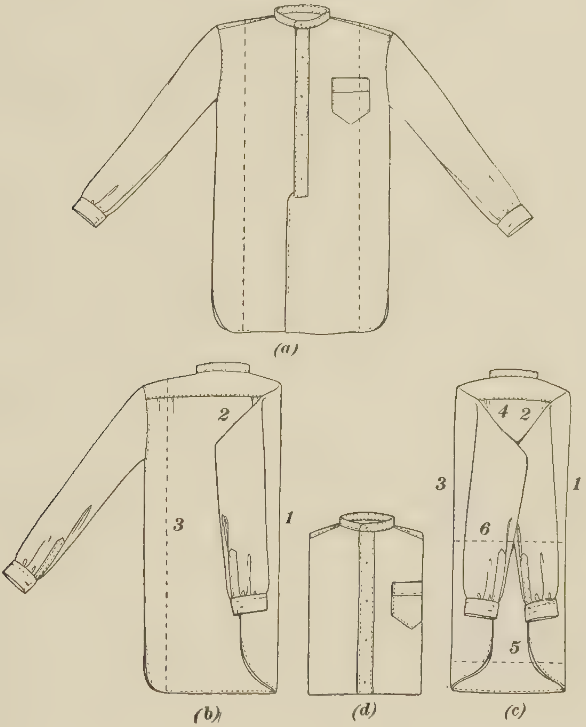


FIG. 29

130. The process of folding a *man's shirt* is shown in Fig. 29. The difference between this method and the one employed in folding a nightshirt lies principally in the folding of the sleeves. The first fold is a lengthwise one, as at *1*, view (*b*), the second turn places one of the sleeves as at *2*; the third is another lengthwise one, as at *3*;

and the fourth one places the other sleeve as at *4*, view (*c*). Two more folds, as at *5* and *6*, result in the folded shirt shown in view (*d*).

This same process applies to *pajama coats.*

131. *Smoothing and folding, without ironing*, certain articles, such as bath towels, wash cloths, and crêpe garments, is practiced by many housewives, by some because of the time saved, and by others because they prefer the freshness of unironed garments.

132. Airing Clothes and Sorting Them.—Directly after ironing and before putting bed linens and garments away in drawers, do not fail to air them thoroughly. This is necessary so that no dampness will remain and there will be no likelihood of the clothes mildewing or becoming musty. A rack near the ironing board is a handy place to air clothes; then if the rack can be stood where there will be a free circulation of fresh air, the clothes can regain much of the freshness which the hot iron destroys.

While you are finishing the various pieces, you can save the length of time of an extra sorting by placing all similar articles together on the rack or on a table.

FINE LAUNDERING

133. Although the general principles of laundering are the same for practically all cotton or linen fabrics, there are always a few exceptions, and some articles must be handled in a slightly different way to be satisfactorily finished. Consequently, it is a good plan to make a collection of fine clothes and give a special time to their laundering. These include lingerie dresses, babies' finery, delicate laces, and embroidered pieces.

Although silk underwear and hosiery fall under the division of fine laundering, it is best not to make a collection of these for washing at some convenient, but postponed, date. Such articles, because of their contact with the body, will serve longer periods of usefulness if washed when they are removed. Also, if done at once, they can be washed more easily and with less friction on the delicate fibers. Dealers in such goods always recommend that it is a saving to wash silk stockings and underwear when they are taken off at night. And this need not sound too great an undertaking to even the busiest and most tired person, for the soap flakes on the market now have taken much of the tedium out of washing.

134. Washing Fine Articles.—The first consideration is to wash fine garments in clean, soft, warm, not hot, water, and with mild soap. Make a good lather, and then gently squeeze the fabric through the solution. Do not rub, for rubbing will injure fine fabrics and roughen embroidery stitches. If any part of a stamped embroidery design is visible, it should be removed before washing by wiping it carefully with a soft cloth that has been saturated with gasoline or turpentine, so that there will be no possibility of any stamped lines remaining after the article is laundered.

135. Drying Fine Articles.—Do not put extremely delicate things through the wringer; instead, squeeze the water out and thus avoid the danger of strain. To remove the water from frail fabrics, a good plan is to roll them in a Turkish towel. Spread the towel out first and lay the pieces on top of it; then roll up the towel, pressing on it as the rolling is done. The towel will absorb a great deal of the water, and put the pieces in a condition for easy ironing.

Never let fancy-work pieces that are not starched get thoroughly dry. Have them as free from water as possible and iron while still damp.

136. Stiffening Fine Articles.—Some delicate fabrics may not require a dressing, but if one is necessary, one of several agents may be used, depending on the type of material and its color. Most organdie of the better quality has what is known as a permanent finish; that is, a crispness not affected by soap and water. This sort of fabric does not, of course, require any further treatment, but if the organdie feels soft to the hands when wet, some stiffening is necessary.

When the color is rather dark, gum-arabic solution is best for it, the proportions given in Art. 87 being satisfactory.

If the garment is light in color, use the borax solution given in Art. 86, remembering, too, that a garment treated in this way should be ironed while damp.

Gum arabic is as satisfactory for voile, dotted Swiss, and similar materials as it is for organdie. After the excess moisture has been squeezed out, the garment should be hung up until dry. It should then be dampened, rolled in a Turkish towel until the moisture is evenly distributed, and ironed.

Starch, the usual stiffening agent, is not especially satisfactory for sheer materials, because of its tendency to thicken on the threads and take away from the transparency of the fabric.

137. Laundering Garments Having Ribbon.—Garments in which ribbon is used should have the ribbon removed before laundering. To remove ribbon so that it may be replaced quickly, tack a length of narrow tape at the end of the ribbon, lapping one over the other, and then draw the ribbon out of the beading so as to leave the tape in its place. The ribbon may be replaced after laundering by simply reversing this operation.

138. Laundering Embroidery Work with Colored Thread.—If embroidery work is done with colored thread, wash the piece in lukewarm suds as quickly as possible, rinse it a couple of times in clear water, and iron it at once. Do not roll it up nor let it stand, for the colors might run.

LAUNDERING LACES

139. Wet Cleaning Laces.—There are many methods of cleaning lace, but in all of them the main point to be observed is to refrain from rubbing the lace, as rubbing is liable to tear the threads.

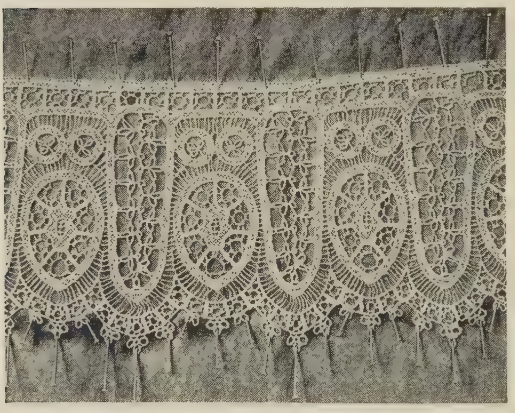


FIG. 30

A very good method consists in preparing lukewarm suds, allowing the lace to soak for some time, and then washing carefully by squeezing the suds through it. Rinse thoroughly and blue or tint, if desired.

For stiffening, use gum-arabic dressing, and, after rinsing thoroughly, pin the lace on a pad made by fastening towels on an ironing board or similar surface. Shape the design of the lace well, as shown in Fig. 30, and draw the points out and pin in place so that they may dry in position.

140. Another method consists in winding the lace around a piece of unvarnished broom handle or a glass bottle, and letting it soak overnight in warm soap-suds. Rinse it well in warm water, soak it over night in soap-suds again, and rinse it thoroughly without rubbing.

Also, a clean, self-sealing fruit jar may be used for washing lace. Fill the jar half full of warm, soft water, and put in 1 tablespoonful of soap jelly, soap flakes, or white soap shaved fine. Place the lace in the jar and fasten the top securely. Shake well until the lace is thoroughly washed; then lift it carefully from the jar, clean the jar, and fill it half full of warm rinse water. Put the lace back in the jar and rinse it by shaking, just as when washing the lace. Take out the lace and pin it on a dry cloth or lay it between pieces of white blotting paper to dry.

141. When washing Battenburg or similar laces, a good method is to baste the lace carefully to a piece of white cotton material with the right side next to the cotton, use one of the washing processes, and then iron before removing the bastings.

Still another method of washing fine lace is to permit the lace to lie in borax water for 24 hours, and then squeeze it through several rinse waters without rubbing. Use 1 tablespoonful of borax to a quart of water in making the borax solution. After the lace has been rinsed, steam it and pull or pin it into shape. Do not iron it if the lace is of a very delicate variety, as the weight of the iron presses down the threads and makes them shiny and glossy.

142. It is not advisable to wash *black laces* with soap and water, but they may be freshened by dipping them into 3 parts lukewarm water and 1 part vinegar. They may be very thoroughly rubbed with the hands in this solution and then stretched on a pad, as are other laces, for drying.

143. Washing Fringe.—To wash fringe, either silk or cotton, proceed in the manner recommended in Art. **139** for washing lace, omitting, of course, the stiffening. Shake the fringe after washing and stretch the woven edge and tack it on a padded board to dry.

While it is still wet, comb it with a scrupulously clean hair comb and weight the bottom edge.

Since fringe curls in washing, dry cleaning is the preferred process. Rolling the fringe around a bottle or piece of cardboard will help considerably to prevent curling, and should always be done while the fringe is still damp.

144. Laundering Lace Curtains.—To launder lace curtains presents the difficulty of removing soil without injuring the delicate fibers of the lace and without stretching the curtains out of shape.

An excellent way to make sure that curtains will be the same length after washing as they were before is to measure them before they are tubbed, and if curtain stretchers are to be used adjust the curtain stretchers to the right size. Then, after washing, you can fasten the curtains on the frame and be sure that your curtains will fit the windows. If you dry the curtains on a sheet on the floor or on a mattress, you can dry them to measurements as well as if they were on curtain stretchers.

145. The first step in the process of cleaning is to brush or shake the curtains carefully to remove as much dust as possible. Next, soak the curtains overnight in a tub of cold water to loosen more dirt and to make rubbing unnecessary. In the morning, put the curtains into lukewarm water in which soap flakes or soap jelly and a little borax have been dissolved, using enough to make good, "live" suds. Instead of rubbing, sop the curtains up and down and squeeze the water out of them, forcing the dirt out with the water. Then keep sopping and squeezing them in clear water of the same temperature, giving them enough rinsings to free them from all trace of soap or dirt.

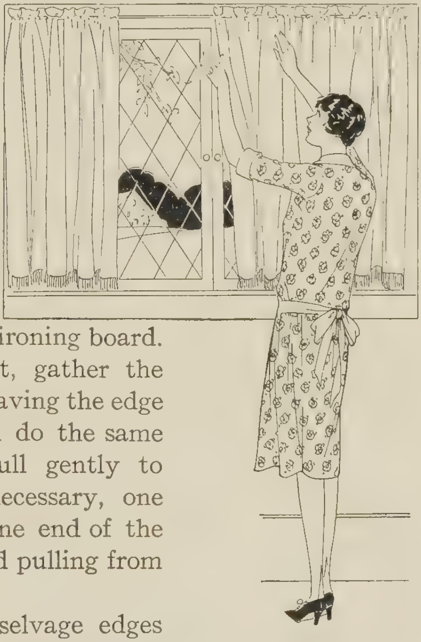
At this stage, one of two methods may be chosen for completing the laundering of curtains. One method is to spread curtains on the grass or hang them on the line to dry, and then, when dry to stiffen them, using if possible a gum-arabic stiffening, as this will make an even solution that will not fill the meshes of the lace. This method bleaches the curtains.

The other method is quicker and is the one in use in the majority of households. The stiffening is done immediately after the rinsing and before the curtains are dried.

Starch may be used instead of gum arabic, if it is made thin enough so that it will not fill the meshes of the net.

146. *Loosely woven curtains*, such as lace and net, should be dried on stretchers. To use curtain stretchers successfully, certain precautions must be taken. Because the strain placed on the edges of the curtains is unequal to that which the rest of the curtain receives, they are likely to stretch into ugly scallops and to have large pinholes in them.

To equalize the strain and prevent the formation of scallops, use light-weight unbleached muslin torn lengthwise into 4½-inch strips. Fold these strips double and overcast the raw edges together. Baste the edges of the lace curtains firmly over these raw edges, lapping them over about ½ inch. Use four separate strips for each curtain, letting them cross at the corners and extend 6 or 8 inches beyond. Then attach the firm, folded edge of the muslin to the stretcher, thus eliminating unattractive scallops on the curtain. Of course, the additional width of the muslin strips must be taken into consideration in adjusting the size of the stretcher.



147. *Firmly woven curtains* may be ironed, but great care must be exercised in ironing to keep the curtains straight. It is advisable to have the curtains pulled straight and true just before placing them on the ironing board.

To pull the curtain straight, gather the hem of one end into the hand, having the edge even, and have another person do the same with the other end; then pull gently to straighten the threads. If necessary, one may do this alone by pinning one end of the curtain to the ironing board and pulling from the other end.

Ironing a curtain with its selvage edges together also will help to keep it straight. The lengthwise crease need not be ironed in. The curtain may be ironed on both sides, except near the crease, and then opened out for the ironing of the remainder. A satisfactory method for ruffle curtains is to dry them on a stretcher and then iron the ruffle.

148. Tinting Curtains.—It is possible to restore curtains to their original color or to make them any desired color. For this purpose, commercial tinting powders may be purchased in any color. Also, such agents as crêpe paper, red ink, tea, coffee, and ocher may be pressed into service. Directions for using crêpe paper and red ink are given later in Art. **178** to Art. **180,** inclusive.

To obtain a cream color, use tea and coffee mixed together in equal proportions. This gives the desirable "store tint" and is more satisfactory then either one used alone.

To obtain an écru color, use a mixture of very strong tea and coffee together, or powdered ocher. The amount necessary depends on the number of curtains, and can be judged by trial. Tint the curtains the right tone or perhaps a trifle darker to allow for the color that will be taken out during the starching.

It is wise to tint the starch also. If you choose ocher as the coloring agent, you will usually find ½ teaspoonful of ocher for each quart of starch a good proportion. Blend the ocher with cold water first and then stir it thoroughly into the starch to avoid any possibility of causing streaks. Always try the mixture on a small piece of lace to be sure of the desired color. If you choose tea or tea and coffee, have it cold and blend it with the starch as described for the use of ocher, and test the strength of the colored starch by trial.

LAUNDERING SPECIAL SILK ARTICLES

149. Washing Silks.—Because silk is made of animal fibers, which are dangerously affected by heat and rubbing, garments made from silk require particular handling, otherwise they will harden, become yellow, or shrink.

In general, the following facts need to be known:

Hot water, ammonia, and strong soap yellow silk.

Rubbing injures the delicate fibers.

Too hot an iron yellows, stiffens, and cracks silk.

150. To wash the fabric, put sufficient warm—not hot—water into a pan or tub of proper size to accommodate it and add sufficient soap jelly or soap flakes to make a lather. Using a little borax that has been diluted in hot water will help to make live suds. Immerse the garments and cleanse by squeezing the suds through them, not by rubbing.

Always rinse thoroughly in at least three lukewarm waters, for unless all traces of soap are removed, the fibers will be injured and the fabric will also be more difficult to iron. To make sure of neutralizing the effect of the soap, add a little borax to your second rinse water. If bluing is desired, have the water lukewarm and use very little bluing, applying the same suggestions as given previously for bluing cotton fabrics.

Squeeze silk fabrics or put them through the wringer, first loosening the rollers. Never twist, as this stretches and loosens the threads.

151. *White or light silks* should be washed in water barely warm, so that there will be no heat to yellow and weaken the fibers. Ammonia should never be used, but a little borax may be added to the wash water, as it not only softens the water but acts as a mild bleach. White washable-silk fabrics may be dipped in blue if the usual precautions for bluing are taken. To dry, they should be rolled in a towel rather than hung on the line.

Colored silks that are fast in color may be treated in the same way as light silks. If the colors in a garment are likely to run, shake it out and allow it to dry slightly before ironing.

152. Color Setting in Silk.—To set the color in silk before washing, lay it for a short time in water containing vinegar and salt in the proportion of 1 tablespoonful of vinegar and 1 teaspoonful of salt to 1 quart of water, using enough of the solution to cover the material well.

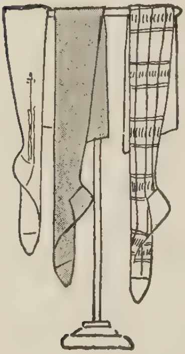
153. Washing Georgette and Other Crêpes.—Since crêpe fabrics shrink when wet, such materials should not be allowed to dry thoroughly, but should be rolled in a towel and then gently stretched out to the proper shape while ironing. Of course, care must be taken to have the wash water and the rinsing baths all of the same temperature, and that a low one, so as to minimize shrinkage.

154. Brightening Colors in Silks.—If the bright tints of the silk appear to have faded in the wash, 1 tablespoonful of vinegar to 1 quart of water used as the last rinse water will help to revive the color; but if the color has disappeared in spots, then 1 tablespoonful of ammonia added to each quart of water will prove a better agent, provided, of course, the color is such that it will not be affected by the yellowing properties of ammonia.

155. Stiffening Silks.—It may be necessary to apply a dressing to some silks after washing. Good-quality taffeta will not require stiffening, and some other silks will prove to have sufficient dressing if they are ironed while damp. However, when a dressing is needed for silk, *sugar and water* will be found very satisfactory. Use 1 to 2 tablespoonfuls of sugar to each gallon of warm water. *Gum-arabic dressing*, Art. 87, also, is excellent for soft silks.

156. Ironing Silk.—All silk should be ironed while damp or when thoroughly dry, for if it must be sprinkled, the sprinkling will spot it. Pongee is an example of a silk weave which looks better if ironed while dry. If it is necessary to dampen the silk while ironing, lay a damp cloth on it and press over the cloth. Dampening the cloth in the center only and leaving the edges dry prevents the making of marks where the wet cloth touches the part freshly ironed.

For the best results, have the iron only moderately hot, and do the ironing on the wrong side, or with a damp cloth over the right side of the material. To avoid the hard, shiny effect that often results from ironing silk, have the ironing board covered with smooth wool of the cashmere variety, not the fluffy kind. Old wool is usually better for this purpose than new wool.



Do not iron white silks before putting them away for the winter, for then they will become yellow more readily.

Some silks, especially of the crêpe and jersey weaves, both shrink and stretch. Consequently, to make sure that a garment is the correct length and size after laundering, it is wise to measure it and iron according to measurements, as in the case of curtains. This precaution should be taken especially in the case of costume slips, for it is very important that they be the right length.

157. Washing Silk Hosiery.—Wash silk stockings each time after they are worn, for perspiration affects silk hose almost as seriously as does strain.

To wash, prepare light suds in hot water and dissolve the soap thoroughly. Add cold water until lukewarm and then dip the stockings and press the suds through them. Rinse in two lukewarm waters, and then squeeze them gently, but do not wring.

When washing colored hoisery, do the work rapidly, using water that is almost cold. Also, use fresh suds for each different color.

Dry stockings in the shade or indoors, but never on or over a radiator. If the stockings are embroidered in colors, hang them up with a cloth inside to keep the colors from running.

It is advisable not to iron silk stockings. Pull them into shape while damp.

158. Silk Underwear.—Directions for washing silk underwear often accompany the underwear when it is purchased. At least this is true in the case of good-quality underwear, and that is the only safe kind to buy, for the cheaper grades shrink and break under strain. Of course, the accompanying directions should be noted, but in general they will be found to be the same as those given in Arts. **150** and **151**.

At times it is necessary to rub garments. This can be done with safety if only light, gentle rubbing is employed simultaneously with the squeezing, so that the garment is not rubbed dry.

As hot sun and hot irons are as injurious as hot water, partly dry the underwear in a towel and finish with a warm iron.

159. Silk Gloves.—The same general methods as are given for silk hosiery and silk underwear apply to the washing of silk gloves. Having them on the hands makes it easier to find all of the soiled spots and also facilitates any necessary rubbing, which should be done very gently.

160. Laundering Corduroy.—Although corduroy is a cotton material, it has a nap like velvet and is washed as if it were of pure silk, except that it is first brushed to remove all dust.

Garments of corduroy should be washed alone in warm water with mild soap or soap flakes worked to a good suds, and care must be taken not to rub, squeeze, or iron such material. Souse the garment up and down in several waters and rinse thoroughly in two or three waters. Then hang it on the line dripping wet and in the wind if possible.

When dry, brush well to raise the nap. It may be necessary, also, to steam the corduroy. To do this, wring a cloth out of water, lay it on the corduroy, and run a hot iron over the cloth so as to steam and not press. The iron should be held at the proper height in order to draw the nap up to it, and great care must be exercised not to lower the iron, for then the nap will be pressed down instead of raised.

LAUNDERING SPECIAL WOOLEN ARTICLES

161. General Directions.—Because wool, as well as silk, is spun from animal fibers, it demands as much care in its treatment as silk. Keeping in mind the following facts about washing wool will help in lengthening the life of woolen articles and in keeping them soft and in shape until the end.

Use soaps in solution to eliminate rubbing.

Use mild soaps.

Have all baths the same temperature to minimize shrinkage.

The use of ammonia water in the proportion of 1 teaspoonful of ammonia to each gallon of water in the final rinsing will help to restore the new appearance of the material.

Rubbing will knot the fibers and harden the wool.

Woolens may be hung out to dry, but they are easier to handle if ironed while still damp.

When hanging woolens to dry, avoid a very warm place, as heat will cause shrinkage.

In ironing wools, have the irons only moderately hot and iron such materials on the wrong side if possible. If you iron them on the right side, place a damp cloth over the material.

A wringer may be used to remove excess water from woolen articles, if care is taken to place the articles in the rollers so that they will not lose their shape.

162. Setting Color in Woolens.—To set the color in woolens, soak the materials for 2 hours in a vinegar solution made in the proportion of $\frac{1}{2}$ cupful of vinegar to 1 gallon of water.

163. Drying Woolens.—Dry woolens in an even temperature; that of the ordinary room is best, as heat increases shrinkage. Do not hang woolens out-of-doors in cold weather or on sunny or windy days, as the extreme in temperature will cause shrinkage and the wind will destroy the shape of garments.

Children's shirts and stockings should be dried on wooden frames.

Flannel underwear may be dried flat and stretched to shape.

164. Pressing Woolens.—Woolens should be pressed with a warm iron, never a hot one, as wool scorches very easily. Lightweight woolens may be ironed when absolutely dry by placing a piece of damp cheesecloth over the material and using a warm iron. Otherwise, iron all woolens on the wrong side.

165. Laundering Sweaters.—Keep knitted and crocheted wear under water while washing and do not pull or twist it in the process. Lift such things carefully and squeeze out the water gently. If the garment is measured before being washed, it may be drawn out carefully and smoothed into its original size while wet, as shown in Fig. 31. Dry it on heavy towels spread on a table or on a flat, padded surface.

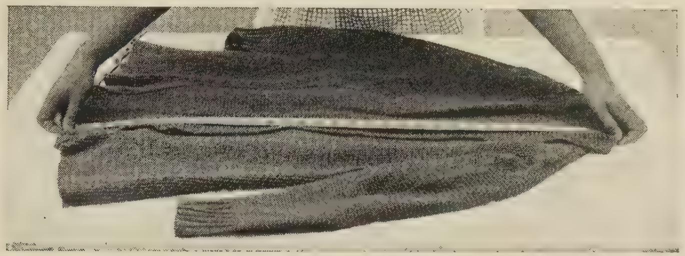


FIG. 31

166. Laundering Wool Blankets.—There is no reason why wool blankets, unless worn very thin, should not be so soft and fluffy after laundering as before. Put each blanket through two soapy waters, having the water lukewarm and using a mild soap or soap flakes. Rub the soiled edges thoroughly but lightly and rinse in several lukewarm waters. In the last rinsing water, dissolve enough soap flakes to make the water look milky. This helps to keep the wool fibers soft.

Another means of keeping wool blankets from becoming stiff and harsh is to add a little glycerine to the last rinse water. This replaces the natural oils that are removed by the washing.

Next, put the blanket through the wringer, having the rollers loosened, and then shake it well and hang it on the line, being careful to have half of the blanket on each side of the line and to have it very straight. When dry, press the edges lightly, if necessary, and then brush with a soft brush to raise the nap.

167. Washing a Blanket Bath-Robe.—Wash a blanket bathrobe with soap and water, rinse thoroughly, but do not wring. Place on a coat hanger, hang on the clothes-line, and let it drip; then when partly dry, stretch it into shape. Very little pressing will be required. When thoroughly dry, brush with a stiff brush or a whisk broom to raise the nap.

BLEACHING

168. Bleaching Cotton and Linen.—White cotton or linen fabrics may be bleached if they have become yellow from age or gray from improper laundering. It is possible also to remove color from some materials to make them white or to prepare them for redyeing.

169. Bleaching Agents for Cotton and Linen.—If clothes require bleaching, *expose them to the sun*, preferably laying them on the grass. Rain also is a bleaching agent, so if a shower or a soft rain comes up while clothes are laid out to bleach, the housewife is truly fortunate.

In cold weather, clothes may be hung on the line. It will not injure them to freeze; in fact, freezing is considered a very efficacious bleach. The caution necessary is that one should not allow the garments to freeze to the line, for they might be torn in removing. Also, allowing frozen clothes to flap in the wind may result in tears. Letting clothes lie on the snow is still another effective bleach.

170. If sun bleaching does not bring about the desired results, or if it is not possible to hang garments out-of-doors, they may be whitened by soaking them for a few hours in *borax water*, made by using ¼ cupful of borax to 1 gallon of water.

171. *Javelle water* is the most powerful agent for bleaching white cotton goods requiring special treatment. It may also be used for linen, if diluted, but is too strong for silk and wool, and in any case should be used with great care.

A recipe for Javelle water is as follows:

1 pound of washing soda	½ pound of chloride of lime
1 quart of boiling water	2 quarts of cold water

Put the soda in an agate or earthenware dish and add the boiling water. Dissolve the lime in the cold water, let the mixture settle, then pour the clear lime liquid into the dissolved soda. Strain this, then bottle, and keep in a dark place.

172. As a bleach for cotton, use 1 pint of Javelle water to 1 gallon of hot water. Dip the article to be bleached and allow it to remain in the bleach 2 or 3 minutes. If the material is very yellow, put it in and bring it to the boiling point, but do not allow it to boil. Next, remove the garment and rinse several times in ammonia water so that no Javelle water will remain to injure the fiber. About 3 tablespoonfuls of "household" ammonia to each gallon of water makes a satisfactory solution.

For bleaching linen, use ½ to ¾ pint of Javelle water to each gallon of water and proceed as for bleaching cotton.

173. Bleaching Woolens.—Generally, the bleaching of woolens is not satisfactory and involves considerable time. *Potassium permanganate* may be used, however, if a bleaching agent is desired. First wash the article carefully and then prepare a quantity of potassium permanganate solution by dissolving 1 teaspoonful of the crystals in a pint of warm water. Allow this to cool before using.

After immersing the fabric, allow it to remain from 2 to 3 minutes and then remove the brown or purple stain, which it will leave, by dipping the material into a solution of water, hydrogen peroxide, and acetic acid. Use 1 part hydrogen peroxide, 1 part acetic acid, and 2 parts water. A strong solution of permanganate may be prepared and kept in a fruit jar and diluted when needed.

174. Bleaching Silk.—Silk cannot be bleached satisfactorily. It may be somewhat whitened, however, by dipping it in a solution made by pouring 1 pint of boiling water over 1 tablespoonful of borax and adding 3 pints of cold water. Allow this to cool before dipping the silk. Repeat after drying if necessary.

To whiten silk that has yellowed, another method is to put 1 tablespoonful of turpentine into 1 gallon of rinse water. This does not leave an odor.

If white silk becomes unattractively yellow and cannot be restored, it is advisable to tint or dye it.

TINTING

175. Many women like undergarments in soft tints, or *pastel colors*, as such tints are called, expressing great fondness for petticoats, princesse slips, night dresses, camisoles, and combination suits in pastel crêpe de Chine. Unfortunately, though, the tints that are most suitable for undergarments, as the pale yellows, pinks, blues, and lavenders, grow dim when the garments are washed, frequently becoming so murky-looking as to lose their beauty. It is possible, however, to restore such tints or, if desired, to change them entirely by means of tinting, a process in which tinting powder, soap dye, red ink, colored crêpe paper, or colored tissue paper is utilized as the coloring medium.

Nor is tinting limited to soft, dainty fabrics and articles; it is just as successful in the case of draperies, sofa pillows, blankets, and rugs. With the exception that such articles are somewhat awkward to handle and require larger containers and more dye, the tinting of them is as simple as the tinting of a scarf or a step-in suit.

176. Tinting Powders.—One of the simplest agents to use comes in powder form in various colors. These powders may be purchased at drug stores or at stores in which dyes are sold. The packages in which they come contain directions for their use.

177. Soap Dyes.—In cake form, there are the soap dyes, which are sold in nearly all drug and department stores. These may be used for tinting and also for dyeing dark colors. The kinds of soap dye that may be used without boiling are especially convenient, in that the soap dye accomplishes both the cleansing and the tinting of the garment in one operation. Besides, in the use of soap dyes, there is the added advantage that they do not discolor the hands nor the utensils employed in tinting the fabric.

If the directions accompanying each cake of soap dye are carefully followed, the results will almost invariably prove satisfactory.

178. Colored-Paper or Ink Tinting.—If it is not possible to procure regular tinting materials, tissue or crêpe paper may be utilized.

This type of tinting is possible only after the garment to be treated has been washed and rinsed without bluing. To a fresh rinse water, add lemon juice in the proportion of 1 tablespoonful to 1 gallon of water, the purpose of which is to aid in distributing the color evenly. If it is not convenient to use lemon juice, vinegar in the same proportion will answer. Next, dip into the water a 3- or 4-inch square of tissue or crêpe paper, the color of which is several shades deeper than the color desired for the garment, and squeeze the color out of it.

179. Stir the coloring into the water with the hand, and then dip a scrap of cloth into the water to make sure that the tint is as desired. Of course, the tint will appear a little deeper while the sample is wet than it will when dry. However, care must be taken not to get the tint too deep. Next, rinse the garment in this tinted water, dipping it quickly so as not to permit the formation of streaks. If the tint is not deep enough the first time, dip the garment again. Then wring it out thoroughly and make ready to dry or to iron, as the material demands. If the material must be dried before ironing, shake it frequently during the drying so as to avoid streaking.

As a rule, very firm materials are not satisfactory when tinted, as they have a tendency to streak, but all soft fabrics will yield naturally to the treatment described.

180. The colors obtained by tinting are not always "fast" because they are not boiled in, and must therefore be renewed each time the fabric is washed. Some women do not consider fading a disadvantage, however, for in this way a change of color may be had each time a garment is washed.

When pressing garments that have been tinted, protect the ironing board with an old cloth, as the color is likely to stain the cloth slightly.

181. Dry Tinting.—The dry-tinting method is occasionally used to color laces, since it does not destroy the new look as does immersing them in a wet solution. The coloring compound is made by mixing dry powder-paint and corn-starch. Practically all the tints needed can be obtained by the use of ocher, Prussian blue, black, carmine, and brown in various combinations and proportions. Simply stir a small quantity of the desired color into the corn-starch, increasing the amount of paint until the correct tint is obtained. Then rub the colored corn-starch in the lace that is to be tinted, and lay aside between papers until it has taken a sufficiently deep tint.

WASHING GARMENTS HAVING OFFENSIVE ODORS

182. To wash garments having offensive odors, use *formaldehyde* in the water in which such clothes are soaked. About 1 teaspoonful to 1 quart of cold water is a sufficient proportion. Formaldehyde may injure the skin; therefore, the clothes should be lifted on a stick and rinsed thoroughly before washing.

STERILIZING INFECTED CLOTHING

183. Boiling is the simplest method of sterilization. Heat may be injurious to some articles, however, so they must be disinfected before washing by immersing them in certain solutions.

184. The **U. S. Public Health Service** gives the following directions for handling infected clothing. Bed linen used, or clothes worn, by a person suffering from, or exposed to, a contagious disease, may be disinfected previous to washing by immersion for one hour in one of the following solutions:

A 5-per-cent. dilution of the commercial solution of *formaldehyde* (*formalin*).

A 1-per-cent. solution of *phenol* (*pure carbolic acid*).

A $\frac{1}{4}$-per-cent. solution of *cresol* (*liquor cresolis compositus*).

Infected clothing may also be readily sterlized by immersing in *boiling water for 10 minutes.*

Woolen goods may be disinfected by immersing in *water maintained at a temperature of 165 degrees F. for 20 minutes.* If the goods are then carefully washed and dried, no undue shrinkage of the garments should result and the infectious agents of disease, except those due to spore-forming bacteria, such as anthrax and gas gangrene, will have been destroyed.

Soaking in a cleaning solution prior to the disinfecting process, may prove advantageous in removing the dirt and stains. These cleaning solutions may be readily sterilized after use by boiling them in the containers in which they are used. The person who handles the infected garments should wear some form of apron to protect the clothing, and this apron should be disinfected immediately after the soiled clothes are handled. Also, the hands and forearms should be thoroughly scrubbed with soap, water, and a nail brush for 10 minutes by the clock, and thoroughly rinsed in either phenol solution or the cresolis solution mentioned above or in a 1:1000 solution of bichloride of mercury.

These precautions are necessary in order to prevent the germs on the clothes from being carried to the mouth of the one handling the clothes or indirectly to the mouths of others.

LAUNDERING AS A BUSINESS

185. If one has a small capital to install machinery (it need not be elaborate) and a means of conveying the clothes, a laundry business may be started; and if the field is a good one and the work receives close attention, it is bound to grow. As the business begins to pay for itself, equipment may be added from time to time. If one were contemplating such a project, the best plan would be to visit a number of commercial laundries, perferably the smaller ones, and, if possible, to work in one to gain experience.

186. Hand Laundries.—If one wishes to start business without an outlay of much money, one may specialize in fine laundering. Often the garments in the so-called "hand" laundries are washed very satisfactorily in machines and particular attention is given to them in the starching and bluing processes. All garments of course, are ironed by hand.

187. Commercial Laundering.—Laundering by the machine process may be started in a small way as mentioned. Usually all of the washing and most of the ironing is done by machines. All of the ironing in some large laundries is done by machines that are made especially to iron certain garments.

Service rendered by a commercial laundry comes under three heads; finished work, rough-dry laundering, and wet-wash service.

Finished work brings the clothes from the laundry ready to put away.

Rough-dry laundering means that the clothes are ready to be dampened for ironing.

Wet-wash service brings the clothes to the home ready to be put on the line for drying.

Flat work in laundry refers to bed linen, table linen, and like pieces. This is generally rated by the dozen or pound and at comparatively low prices.

188. Community Laundries.—More and more the idea of community laundries is becoming popular. Often a few families, perhaps three, equip a room in one of the homes with modern apparatus, secure some one as professional laundress, and in this way have all their laundry work done by the most up-to-date methods and by a great saving of time, money, and peace of mind.

In a surprisingly short time, a well-equipped home laundry begins to pay for itself. Consequently, it is possible for any woman who understands laundry work and who desires to make it a means of livelihood, to set herself up in business and in a short time have a home-laundry business that is thriving.

DRY CLEANING

MEANING AND SCOPE

1. In the care of clothing, cleaning by soap and water is the most frequently employed process, and possibly the most valuable, but the possibilities for renovating by the method known as **dry cleaning,** or *French cleaning*, which is cleaning by means of absorbents and certain solvents, must not be overlooked. Dry cleaning has certain advantages that are not found in any other form of cleaning, chief among them being its harmlessness when applied to even the most delicate of fabrics or laces. Also, it does not affect color. It is these characteristics which have probably brought about the use of the term "dry cleaning," for, although the articles being cleaned are generally wet by the agent used, still the rapidity with which the evaporation takes place and the lack of effect from the wetting (except, of course, the removal of soil) has made general the use of a name that might lead to a wrong impression. However, it may truthfully be said that dry cleaning with the proper reagent does not affect the article any more than if it were not wet.

2. The terms **spotting** and **stain removing** must not be confused with dry cleaning. Dry cleaning is the more inclusive term, implying cleaning by immersing articles in gasoline or some similar solvent, and also in absorbents, while spotting, or stain removing, means the use of local applications to remove spots or stains on garments. Although spotting is in reality a distinct process in the care of clothing, it must also be considered as a step in both wet washing and dry washing, for many times garments show stains that must be removed before the all-over methods can be used with safety.

3. Because of the advantages of dry cleaning, its popularity has ever been on the increase, and new methods and new reagents have been adopted by way of advancement. With the increase in demand for it has come the founding of establishments devoted exclusively to this work, where all forms of dry cleaning are done at comparatively reasonable prices. And many persons, because of the lack of knowledge concerning the newest, approved methods and because of a misconception concerning the difficulties and dangers in doing such work in the home, spend considerable money to have simple garments cleaned or discard good, but soiled, garments whose usefulness could have been prolonged. However, with a knowledge of the properties of the various cleaning agents, and with care in regard to a few simple details in handling such materials, even a novice can follow practically all of the dry-cleaning processes and feel reasonably sure of success. Such knowledge is set forth in this chapter in order that dry cleaning need not be considered a secret art, known only to a few, but may be added to the household lore of any woman who has the desire to be thrifty in the upkeep of her clothing.

FABRICS SUITABLE FOR DRY CLEANING

4. Although all cleaning agents may be used on practically all fabrics without injuring them, dry cleaning is best suited to silk, wool, and part-wool materials.

Velvet may be dry cleaned, but it requires a longer time to dry.

Plush and fur may be cleaned by immersion or by brushing and spotting.

Cotton and linens may be dry cleaned if water is likely to affect their appearance dangerously, but soap-and-water cleaning is more simple for such fabrics and gives a freshness that is desirable.

Cloth shoes and slippers, parasols, or articles not made entirely of fabric should not be dry cleaned by immersion. They may be sponged to restore them and to remove stains.

DRY-CLEANING MEDIUMS

CLASSIFICATION

5. There are two principal mediums by which the dry cleaner restores fabrics. These are known as *solvents* and *absorbents*.

6. Solvents are liquids that dissolve grease or gummy substances. Water is the principal solvent, but this belongs to wet washing. The solvents used in dry cleaning are often referred to, in the trade, as *cleaning oils*, but there are certain *volatile liquids*, *acids* and *alkalies* that are equally indispensable, especially for spotting. In some cases, a solvent belongs in more than one class.

The following classification, although not exact as to chemical analysis, is a convenient one for the dry cleaner.

Water
- Cold water
- Hot water
- Distilled water

Cleaning Oils
- Gasoline
- Naphtha
- Benzine
- Benzene or benzol
- Kerosene
- Turpentine

Volatile Liquids
- Alcohol
  - Wood
  - Denatured
- Ether
- Chloroform
- Carbon tetrachloride
- Acetone

Acid Materials
- Oxalic acid
- Hydrochloric acid
- Potassium permanganate
- Hydrosulphite of soda
- Hydrogen peroxide
- Chloride of lime
- Javelle water
- Vinegar
- Lemon juice
- Salts of lemon
- Sour milk
- Buttermilk

Alkaline Materials
- Soap
- Ammonia
- Borax
- Sal soda
- Egg white
- Sweet milk

7. Absorbents, as the name indicates, take up rather than dissolve the particles of dirt. Therefore they are, for the most part, dry cleaners that come in powder, or pulverized, form. They are most successful when applied on fresh stains or on such articles as furs, out of which the soil can be brushed with the absorbent.

According to nature and color, absorbents may be classified as follows:

White Powder
- French chalk
- Magnesia

Kitchen Supplies
- Meals
- Salt
- Starch

Non-Plastic Clay
- Fullers' earth
- Pipe clay

Absorbent Surfaces
- White blotting paper
- Unglazed paper
- Unglazed cloth

SOLVENTS

8. Water.—Although **water** is not generally associated with dry cleaning, it has a very definite place in spotting. Pure *cold water* removes spots, as for example, raw-meat stains, and *hot water* removes spots made by sugar, starches, milk, dust, and some fruits. Also, water is used after many reagents so as to rinse them thoroughly out of the fabric.

Distilled water is the safest kind to use, for all foreign matter has been removed from it by the distilling process. It is the presence of foreign matter, or the leaving of residue, that causes the formation of rings. Water may be distilled by condensing steam, or it may be freed from part of the foreign matter by boiling it and then straining through firm muslin or filter paper, obtainable at many stores. Distilled water may also be purchased at garages.

9. Cleaning Oils.—**Gasoline,** which is obtained from petroleum, is the most widely used dry-cleaning liquid because of its efficiency as a grease solvent and soil remover and because of its comparative cheapness. Its cleansing power was discovered in 1866 by a Frenchman, Monsieur Judlin, and since that time its use as a cleaning oil has become quite general. The principal limitation in regard to gasoline is that it is likely to deaden black and some dark colors or make them gray.

The quality used for cleaning purposes should be the very best obtainable, so that no residue will be left on the fabric. If the gasoline is not entirely clean, it should be strained through a chamois or a heavy cloth to make it satisfactory.

10. Naphtha is a product of petroleum, which, during the refining processes, distils at a lower temperature than gasoline. It is more volatile than gasoline, and much more inflammable. Since it is virtually highly refined gasoline, it is a more powerful cleanser than gasoline, but it must be handled with greater caution. It should never be taken in a house nor used near heat, and it will explode if stored in the direct rays of the sun. A point of superiority of naphtha over gasoline is that naphtha can be used on black and dark-colored materials. Naphtha dissolves fats, turpentine, varnish, asphalt, and rubber.

11. Benzine is highly refined gasoline and is exceptionally effective as a cleaner. However, it is practically impossible to obtain benzine in its pure form, and the oil sold under that name at drug stores should not be trusted, as it is no more than a low grade of gasoline. Benzine and naphtha are sometimes sold as one and the same thing, and can be used interchangeably, but benzine is not so highly refined.

12. Benzene, or benzol, which is the trade term, is a coal-tar product and must not be confused with benzine. It acts like naphtha except that it evaporates more rapidly and therefore is less likely to leave any trace on even the most delicate fabrics.

13. Kerosene is a colorless, inflammable oil having solvent and bleaching qualities. When petroleum oil is being distilled, kerosene passes over after naphtha and gasoline.

Kerosene dissolves gummy substances and wax and serves as a bleaching agent in wet washing.

14. Turpentine is an oil made from the pitch-pine tree. After the bark has been removed, the pitch is collected and distilled with water. What passes over is oil, or spirits, of turpentine and what remains is rosin. When fresh, turpentine is clear in color and not strong smelling, but as it grows older, exposure to air turns it dark in color and gives it a strong odor. When in this state, it should not be used for dry-cleaning purposes, as it will leave a stain.

When turpentine is fresh and when it has been kept well corked, it dissolves grease, wax, tar, varnish, and paint. It is useful also in wet washing for whitening clothes.

15. Volatile Liquids.—Alcohol is a colorless, volatile, inflammable liquid having cleaning properties. *Wood*, or *methyl*, alcohol, which is distilled from wood and is the simplest form of alcohol, dissolves gums and varnishes and is in general use as a stain remover. *Denatured alcohol*, which is *grain* or *ethyl* alcohol made unfit for beverages by the addition of poisonous materials, is a solvent for fats, resins, and oils. Both kinds of alcohol are in general use, particularly on black and dark-colored materials.

16. Ether, chloroform, and **carbon tetrachloride** are colorless, highly volatile liquids formed by distilling certain acids and water. They are solvents of fats, oils, and resins and removers of soil, evaporating so quickly that they do not leave rings, unless, of course, they are old and dark. With the exception of ether, they are not inflammable; but all are anesthetics, so must not be used except where there is free circulation of air. Since these are expensive reagents, their use is confined to spotting.

Carbon tetrachloride is an ideal cleaning fluid because it is noncombustible and leaves practically no after odor, its expense being the only drawback. As an economical measure, it is sometimes mixed with a cheaper cleaning fluid, such as gasoline

Ether and chloroform affect dyes, so therefore fade color.

17. **Acetone** is another dissolver of fats, oils, and resins. It evaporates nearly as quickly as carbon tetrachloride, acts with nearly as much efficacy, and is cheaper, but has the disadvantage of being inflammable.

18. **Acid Materials.**—Certain **acids** and **acid materials** are considered as solvents because of their effect on certain stains, especially those made by alkalies. Among these acids are *oxalic acid*, *hydrochloric acid*, *potassium permanganate*, *hydrosulphite of soda*, *hydrogen peroxide*, and *chloride of lime*, which is used in the making of *Javelle water*. All of these acids have more or less powerful bleaching qualities, but when Javelle water and potassium permanganate are used, the former must be treated with an after application of ammonia water, and the latter with hydrogen peroxide or ammonia water, so that no acid will remain to eat the fabric.

Vinegar, *lemon juice*, *salts of lemon*, *sour milk*, and *buttermilk* also, are largely acid in their composition and effect, and are numbered among the solvents of stubborn stains.

19. **Alkaline Materials.**—When the stain is an acid stain, an alkali should be chosen to treat it, because of the opposite, or neutralizing, effect that acids and alkalies have on each other. Among the **alkalies** that are of value as dry-cleaning agents, there are, first of all, the *soaps* manufactured for use with cleaning oils. Then there are *ammonia*, *borax*, and *sal soda*, which is the crystalline form of baking soda. *Sweet milk* and *egg whites* are other alkalies whose effect on certain stains should be a part of one's dry-cleaning knowledge.

ABSORBENTS

20. The absorbent in most common use is **powdered French chalk,** which is in reality ground soapstone, a very resinous mineral. It is inexpensive and highly absorbent of grease, dust, and coloring matter.

French chalk can be mixed with turpentine, benzine, or any other cleaning oil to form a paste, and then used in this form, particularly on dry spots.

21. **Magnesia** is similar to French chalk in appearance and in use, as it is a light, white, earthy powder that can be used dry or combined with a solvent to make a paste.

22. **Fullers' earth** and **pipe clay** are of the same family, each being a non-plastic clay effective in absorbing grease. The chief difference between them is that pipe clay is white and fullers' earth is light brown. Both absorbents can be mixed with a solvent to make a thick paste for more difficult stains.

23. Some kitchen supplies, such as **meals, salt, starch** (but never flour), do duty as removers of various stains. Also, **white blotting paper, unglazed paper,** and **unglazed cloth** will act as absorbents on fresh spots or when heat is applied to them. They may be used to gather up the worst of a stain, and something else used to take out the remainder. Blotting paper is sometimes shredded, and then crumpled to give it more irregular surfaces and make it more absorbent.

STAIN REMOVING

SCOPE AND EQUIPMENT

24. Frequently it is the stains or spots on fabrics, rather than the dust and soil from wear, that prompt cleaning. And often a fabric is so badly soiled that certain spots or stains must be removed before it can be either washed or dry cleaned. Consequently, *spotting* or *stain removing*, although a complete subject in itself, is here treated as the first step in dry cleaning, and the instruction concerning it is given previous to that on cleaning by immersion in dry-cleaning fluids.

Another time when stain removing may take place is between the dry-cleaning baths. In the treatment of very soiled garments, several baths are sometimes necessary, and often when the garment comes out of the first bath the spots are much more visible, and therefore more easily removed, than before. They may appear again in the second bath, but should be treated again and again until no trace is left.

25. To realize how important stain removing is, one has only to go into the dry-cleaning establishments and look into the stain-removing department. Every dry-cleaning establishment employs skilled workmen known as "spotters," who do nothing but remove spots in garments, either before the first cleaning bath or between the baths. These men are the highest-paid workmen in the establishments.

26. Spotting Reagents.—Numerous cleaning agents and cleaning mixtures are in use for spotting purposes. Some of these are commercial products, or prepared stain removers, which are obtainable at drug stores and which are easy to use because of the complete directions accompanying them. The aim here, however, is to give simply the materials easily obtainable and the methods easy of execution in the home. The most common agents have already been mentioned in Arts. **6** to **23,** inclusive.

27. Equipment for Using Reagents.—To use spotting materials, provide the following equipment:

A soft brush for brushing soil from firm materials.

Blotting paper or a *pad of old muslin* to lay under the spot.

A medicine dropper for applying the reagent.

A tampon of cheesecloth for applying the reagent.

A small sponge for applying cold water after using the reagent.

Small, unpainted blocks of wood with rounded edges may be procured or made, if much cleaning is to be done, to slip under spots that are being cleaned.

An uncovered ironing board, or one protected with a smooth, unpainted wooden cover over the padding, will also be found helpful to handle waists and skirts, as the garment may be turned easily on the board to clean the entire surface.

METHODS FOR REMOVING STAINS

28. Preliminary Cautions.—In removing stains, it is necessary to consider the kind and color of the material to be cleaned, the character of the stain, and its effect on the color. Know first your material, then know your stain, and if the cause of the spot is not known, experiment on a part of the article that will not be seen when it is being worn. Use the simplest reagents first and have them well diluted so that no stronger reagents than necessary are used. Never allow a reagent to remain in the material. Also, when using acids and such solutions as will be harmful if they spread, use a medicine dropper, since the smallest amount can then be dropped on, and confined entirely to, the spot or stain.

One of the secrets of successful stain removal is to have plenty of padding underneath the spot to absorb the liquid, and to change the pad as it becomes wet. Placing a stain downwards on the pad also helps, for then the stain can be forced out rather than drawn through the material to the other side.

29. General Procedure.—In using chemicals, work quickly and give several slight applications over a pad of blotting paper or muslin. Rather than allow much moisture on the fabric, be sure to use blotting paper or muslin on top, also. After applying a chemical to washable material, dip the fabric into clear water or a prepared solution that will neutralize its effect, as the chemical may injure the material if left in.

In cleaning silks, special care is necessary in the use of spotting agents, which should be applied in weak solution. A very good method is to outline the stain with a corner of a moistened cake of soap before beginning work, thus confining the action of the chemicals used. This, of course, can be done only on fabrics that will not be injured by the soap or that can be washed afterwards to remove the soap.

In some cases, the stain is so bad or of such long standing that to attempt to remove it is practically useless. Then, it would be advisable to cover the stained portion, cut it out and appliqué something in place of it, or recut the article to dispense with the stain.

30. Summary of Precautions.—In short, then, the precautions necessary to observe in spotting are:

Consider the kind of material.
Consider the color of material.
Consider the nature of the stain.
Use the simplest reagents first.
Use weak solutions first.
Use a medicine dropper.
Provide plenty of padding.
Change the padding frequently.
Place a stain downwards and work from the wrong side.
Work quickly.

Never allow a reagent to remain in the fabric.

Rinse reagents out with water or use acids and alkalies to neutralize each other.

31. Removing Fresh Stains.—Treating fresh stains immediately prevents the stain from spreading and sinking into the material. This fact cannot be too strongly emphasized, for it always means the saving of considerable time, energy, and cleanser, and may sometimes mean the saving of a fabric, because it is the lack of prompt attention that makes stains sometimes become so "set" that they can never be removed. Putting away a garment that has become soiled means increasing the difficulty of stain removal, and also the penalty that may have to be paid.

32. Using an Absorbent.—Covering fresh stains immediately with powdered French chalk, magnesia, bran, corn starch or one of the other recommended absorbents is a "first-aid" treatment that often proves all that is necessary.

To use an absorbent, French chalk for example, lay the spotted article on white blotting paper or unglazed white cloth, pour the powder directly on the spot and keep changing the powder as it absorbs the soil. It is often well to place the chalk underneath as well as on the stain, for then absorption can take place in both directions.

33. Using a warm iron will facilitate this form of cleaning, as it liquifies the grease or fats and renders the powder effective even on spots that have stood for some time. In this case, place the spot downwards on plenty of blotting paper and put French chalk over the spot; then iron over the chalk, using a warm rather than a hot iron. A hot iron will not only change the color of the fabric but also darken the grease.

When absorption is slow and heat is not used, it is sometimes necessary to leave spots well covered with an absorbent for several days, changing the powder whenever necessary. Rare laces and old silks may take on a renewed appearance if allowed to stand in French chalk for several days.

34. Using Water.—One of the safest cleaning agents to use is water, especially distilled water. Unless the character of the stain and the fabric calls for hot water, try cold water first, as hot water may set the stain. Lay the stain on an absorbent surface and sponge with a lintless cloth, using a fast, circular motion.

If boiling water is to be used, as in the case of white goods having fresh coffee or fruit stains, also for lesser stains made by sugar and milk, or foods made of these ingredients, tie the stained article over a bowl so that the spot is over the center and pour boiling water from a height, as shown in Fig. 1. Pouring from a height gives more power to the water in forcing the stain out.

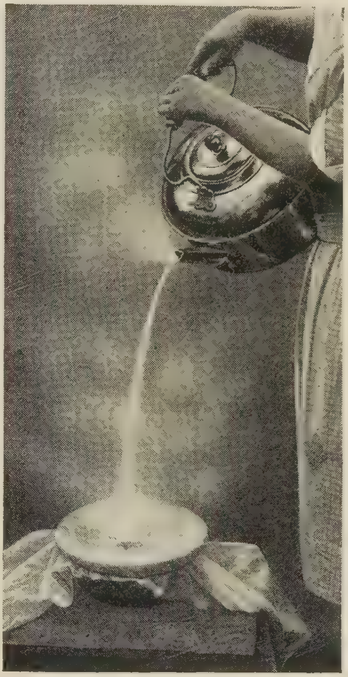


FIG. 1

35. Using Gasoline.—For the purpose of removing stains, particularly with gasoline, a *tampon* is a great convenience. To make this, form into a ball a piece of wadding the size of your fist, or smaller if light-weight fabrics are being cleaned, and place in the center of a piece of white, lintless cloth, tying this so that the corners can be used as a handle.

Lay the soiled article on an absorbent pad. Dip the tampon into gasoline until it is thoroughly saturated and rub the dirtiest places until the greater portion of the dirt is removed. If several garments are to be cleaned in succession, work from the lighter to the darker, for by repeatedly dipping the tampon in the gasoline the latter becomes darker. If the tampon becomes very soiled, make a new one.

36. This method may be adapted to cleaning with naphtha, benzene, and the other cleaning oils. In connection with gasoline sponging, remember that gasoline has no effect on sugar or syrup nor on stains in which these are a main cause. Also, as a general rule, do not use gasoline to clean one section of a garment unless you expect to use it on the entire garment, and all at the same time. Sometimes, of course, gasoline may be used to remove a spot when it is not desirable to clean the entire garment, but great care is necessary in doing this to prevent the formation of a ring. Remember, too, that gasoline is not an efficient cleaner for black.

37. Using Alcohol.—Black and dark colors have to be treated with special care, as they have a tendency to become lighter with spotting. Alcohol is generally preferred for them, as it gives a better resulting color even than gasoline. Some recipes recommend ether and chloroform, but both of these tend to take out color. Alcohol is the preferred cleaner for nearly all stains when the soap-and-water method is not desirable or where it fails.

To prepare an *alcohol sponge*, put 2 tablespoonfuls of wood alcohol in 1 cupful of boiling water and allow this to cool.

Lay the material out on an absorbent pad or in a shallow pan, dip a tampon or a piece of cheesecloth into the alcohol, and then rub the spots thoroughly, rubbing around and around to prevent the forming of rings. Do this very gently so that the color will not be taken out.

38. Sometimes ammonia is added to alcohol for sponging purposes. When this is the case, make the solution in the proportion of $\frac{1}{4}$ cupful of household ammonia to 1 cupful of wood alcohol. Apply as directed in Art. **37.**

Ether and chloroform may be used in the same manner as alcohol, as may also any other cleaner of the same volatile character that is not harmful if part is left in the materials.

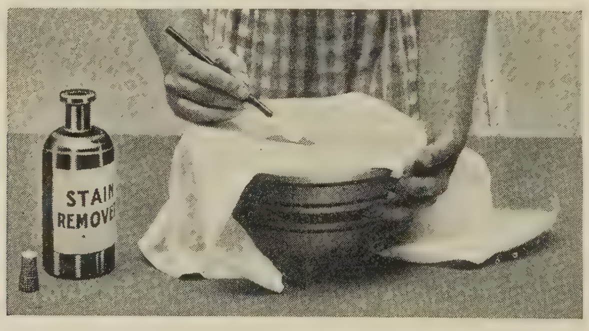


FIG. 2

39. Using Soap.—Often for heavy fabrics that can stand soap and water, the *soap sponge* is excellent. Pour boiling water over Ivory or castile soap that has been cut into small pieces. After this has dissolved and cooled, apply in small quantities, using the directions given for an alcohol sponge.

40. Using Commercial Stain Removers.—Prepared cleaning solutions are a great saving to the home cleaner, both in time and in money, for, unless considerable cleaning is to be done, it is necessary to keep on hand only a small quantity of the required materials. Then, too, having them already mixed properly for general use is a great help.

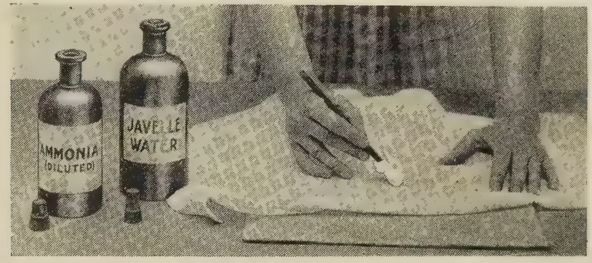


FIG. 3

In using such a solution, it is well to spread the stained portion over a bowl of clear water and apply the stain remover with a tampon fastened over the end of a pencil, as shown in Fig. 2. After a sufficient application of the chemical to produce results, dip into the water the part of the material affected, as such solutions should be well rinsed out of the fabric.

41. Using Bleaches for Removing Stains.—Very often it is not advisable to wash an entire garment to remove a small stain. In such case, the application of a bleaching solution such as Javelle water, borax, or potassium permanganate will prove effective, the proportions for which are given in Arts. 170 to 174, inclusive, Chapter I.

To apply any one of these solutions, spread the article out on a padded surface or blotter, as shown in Fig. 3. Apply the bleach with the aid of a tampon; then, when the stain has disappeared, apply ammonia in the same manner. This counteracts the chemical action of the bleaching solution. Rinse with clear, cold water.

42. Preventing the Formation of a Ring.—One or more of the following methods may be chosen to guard against the formation of rings:

Strain liquids before using them.

Rub around and around from the outside of the spot toward the center.

Rub French chalk over the spot.

Rub the finger nail carefully over the material.

43. A ring is sometimes the result of impure solvents. Therefore, too much stress cannot be put on carefully straining the liquid cleaning agents before using them.

It is sometimes possible to avoid the appearance of a ring, too, by the method used in doing the work. The practice of rubbing around and around from the outside of the spot and concentrating the absorption at the spot itself will sometimes prevent the formation of a ring. In such a procedure, the area covered by the cleaning fluid should be quite large to facilitate quick absorption. When the spot has been removed, soft, lintless cloths may be used to dry the material.

If there is still a trace of the ring after this, it may often be taken away by rubbing French chalk over the spot. Leave this on for 2 or 3 hours to absorb the solvent, and then carefully brush it off.

Sometimes a ring may be removed by rubbing the fabric carefully with the finger nail to make it blend into the rest of the material.

TABLE OF STAIN REMOVAL

44. As an aid in stain removal, Table I, which gives the names of all common stains and the reagents and methods to use in removing them from different materials, is given. This information will prove very valuable and easily accessible, as the names of the stains are arranged in alphabetical order.

In the use of this table, make reference to the more detailed directions governing the different solvents and absorbents. These directions immediately precede.

TABLE I

STAIN REMOVING

Stain	Material	Reagent	Method of Removal
Acid	Washable	(*a*) Warm water and soap	Wash the fabric thoroughly with soap and water to remove the acid, as it may affect the material.
	Washable	(*b*) Warm water and ammonia	Apply ammonia with a soft cloth.
	Non-washable	(*c*) Fumes from strong ammonia	Hold stain in fumes of strong ammonia.
Alkali	Washable	(*a*) Cold water	Wash until material assumes its original color. Rub dry, using a piece of material the same as the stained fabric.
	White, washable	(*b*) Lemon juice	Apply lemon juice and then rinse in warm water.
	Washable	(*c*) Vinegar	Sponge with vinegar and then rinse.
Blood	Washable	(*a*) Cold water	Wash until the stain is partly removed and then wash with warm water and soap.
	Washable	(*b*) Cold water and salt	Same as above.
	Washable	(*c*) Warm water and starch	If material is heavy, apply a thick paste of raw starch and water. Leave this until dry and then brush off. Repeat, if necessary.
Bluing	Washable	(*a*) Boiling water	Wash until all traces of bluing are gone.
	Washable	(*b*) Boiling water and vinegar	Use 1 tablespoonful of vinegar to 1 quart of water. Wash article in this.
	White cotton and linen	(*c*) Javelle water	Use Javelle water as illustrated in Fig. 3 and explained in Art. **41**.
Candy	Washable	(*a*) Cold water	Wash spot thoroughly in cold water.
	Delicate	(*b*) Distilled water	Apply with a tampon or wash spot in it.

TABLE I—(*Continued*)

Stain	Material	Reagent	Method of Removal
Candle Wax	Any	Blotting paper and warm iron See also *Grease.*	Place the material between sheets of blotting paper. Press with a warm iron, moving the blotting paper occasionally. If the wax is colored, remove the coloring matter by sponging with alcohol.
Chocolate or Cocoa	Washable	(*a*) Hot water and soap	Wash fabric thoroughly.
	Silk or wool	(*b*) Cold water and borax	Cover the stain with borax and wash with cold water.
	Delicate, washable	(*c*) Warm water	Sponge with warm water.
Coffee	Washable	(*a*) Hot water and soap	Wash thoroughly.
	Washable	(*b*) Boiling water	If stain is hard to remove, place it over a bowl and pour boiling water through the fabric, holding the kettle high enough so that the water will strike the stain with force.
	Silk or wool	(*c*) Borax and cold water	Same as for *Chocolate or Cocoa* (*b*).
	Cotton and linen	(*d*) Javelle water	Apply Javelle water as a last resort.
Dye	Washable, sunproof	(*a*) Cold or warm water and sunlight	Soak the stain for several hours; then expose it to the sun; if necessary repeat the treatment.
	White cotton and linen	(*b*) Javelle water	For difficult stains apply Javelle water.
	Delicate	(*c*) Wood alcohol	Sponge with wood alcohol.
Egg	Washable	Cold water	Soak in cold water and then wash with warm water and soap.
Fly Paper	Any	(*a*) Gasoline (*b*) Turpentine (*c*) Kerosene	Sponge or wash the stain with any one of the solvents.
	Washable	(*d*) Lard	Rub lard into the fabric thoroughly and then wash.

TABLE I—(*Continued*)

Stain	Material	Reagent	Method of Removal
Fruit and Berries	Washable	(*a*) Boiling water	Pour boiling water from a height, as explained for coffee (*b*).
	Delicate	(*b*) Warm water	Same as above.
	Silk or wool	(*c*) Borax	Cover the spot with borax and wash with warm water.
	White cotton and linen	(*d*) Javelle water	Use Javelle water for difficult stains.
	White cotton and linen	(*e*) Salts of lemon	Apply salts of lemon and then pour hot water on stain.
Glue	Washable	(*a*) Warm water	Soak in warm water until the glue dissolves.
	Any	(*b*) Vinegar	Sponge or soak in vinegar.
Grass	Washable	(*a*) Cold water	Wash until spot is removed.
	Washable	(*b*) Hot water and soap	Use hot water and soap as in ordinary laundering.
	Non-washable	(*c*) Wood alcohol	Sponge with alcohol.
	Washable	(*d*) Sour milk	Soak in sour milk and wash in warm water.
	Washable	(*e*) Kerosene	Apply kerosene and then wash with soap-suds and warm water.
Grease	Washable	(*a*) Warm water and soap	Wash thoroughly.
	Any	(*b*) Gasoline, alcohol, or carbon tetrachloride	Apply with soft cloth.
	Any	(*c*) Blotting paper and hot iron	Use blotting paper under and over stain. Apply a hot iron to melt it.
	Any	(*d*) Fullers' earth or French chalk	Cover the spot with warm fullers' earth or French chalk and let it stand for several hours; then brush off.
Machine Grease	Washable	Kerosene	Apply kerosene and then wash with soap-suds and warm water.
Gum	Non-washable	(*a*) Gasoline	Immerse the stain or apply the gasoline with a soft cloth.
	Washable	(*b*) Lard	Rub the lard into the fabric well, then wash with warm water.

TABLE I—(*Continued*)

Stain	Material	Reagent	Method of Removal
Ice Cream	Washable	(*a*) Warm water and soap	Wash with soap and water.
	Washable	(*b*) Cold water followed by an application of gasoline	Remove as much as possible with cold water and apply the gasoline to remove the grease. If a fruit or chocolate stain remains, remove as suggested under *Fruits and Berries* or *Chocolate or Cocoa.*
	Non-washable	(*c*) Carbon tetrachloride	Apply with tampon.
Indelible Pencil	Washable	(*a*) Alcohol	Soak the stains from 3 to 5 minutes; then wash with warm water and soap.
	White cotton or linen	(*b*) Javelle water	Apply the Javelle water; then wash with warm water and soap.
Ink	Colored, washable	(*a*) Sweet milk	Soak the stains for a few hours, changing the milk when it becomes dark; then wash.
	Colored, washable	(*b*) Mustard	Make a paste of dry mustard and water. Spread over the spot and allow to remain 15 minutes. Wash and rinse the goods and the stain will disappear.
	Any	(*c*) Cornmeal, French chalk, fullers' earth, etc.	Cover the spot with one of the absorbents and rub it in well, working it around and around and renewing it as it becomes soiled. If the dry powder fails to remove the stain, apply a paste made with warm water, and brush it off when dry.
	White, washable	(*d*) Salt and lemon juice	Moisten with salt and lemon juice and place in the sun or hold over the spout of a steaming teakettle.
	White, washable	(*e*) Salts of lemon	Spread the salts of lemon on the stain and pour boiling water through the fabric.
	White, washable	(*f*) Javelle water	Apply Javelle water, if necessary.

TABLE I—(*Continued*)

Stain	Material	Reagent	Method of Removal
Ink	White, washable	(*g*) Vinegar and chloride of lime	Soak half an hour in vinegar and wash; soak in chloride of lime and wash again.
	White, washable	(*h*) Ink eradicators	Follow the directions on the box.
Ink, Red	Washable	(*a*) Soap and water	Wash thoroughly.
	White, washable	(*b*) Hydrogen peroxide	Wash with hydrogen peroxide and then rinse in cold water.
	White, washable	(*c*) Ink eradicators	Follow directions on box.
Ink, Stamping (Used for embroidery designs)	White, washable	Potassium permanganate and oxalic acid (Both are poisonous)	Dissolve ½ teaspoonful of permanganate crystals in 1 pint of water. Dissolve 1 teaspoonful of oxalic-acid crystals in 1 pint of water. Dampen the stain with water, apply the permanganate solution with a medicine dropper, and then pour water through. Apply oxalic acid with another dropper to remove the brown stain made by the permanganate, and wash thoroughly to remove the acid.
Ink, Waterproof		See *Paint* (*b*), (*c*), and (*d*).	
Iodine	Washable	(*a*) Cold water	Soak for a few hours in cold water and dry near a radiator or an open oven.
	Washable	(*b*) Warm water and soap	If the stain is slight, it may be removed by washing with lukewarm water and soap.
	Washable	(*c*) Ammonia	Sponge the stain with household ammonia.
	Any	(*d*) Alcohol	Sponge with alcohol.
	Any	(*e*) Starch	Apply moistened starch and brush off when dry.
Iron Rust		See *Rust*.	
Medicine	Washable	(*a*) Boiling water	Use boiling water as suggested for *Fruit and Berries* (*a*).

TABLE I—(*Continued*)

Stain	Material	Reagent	Method of Removal
Medicine	Washable	(*b*) Soap and water	As in ordinary laundering.
	Any	(*c*) Alcohol	Sponge with alcohol.
	White cotton and linen	(*d*) Javelle water	For difficult stains, try Javelle water.
Mildew	Washable	(*a*) Cold water	If the stains are fresh, they may be washed out in cold water.
	Washable	(*b*) Soap and water	Wash with warm water and soap and dry in the sun.
	Washable	(*c*) Sour milk	Soak in sour milk for a few hours and place in the sun without rinsing.
	White, washable	(*d*) Lemon juice	Wet with lemon juice and dry in the sun.
	White cotton and linen	(*e*) Javelle water	For old stains, use Javelle water and then wash with hot water.
Milk	Washable	(*a*) Cold water	Wash in cold water; then follow with hot water and soap.
	Delicate	(*b*) Cold water followed by gasoline	Sponge with cold water and then remove the grease with gasoline.
Mud	Any	(*a*) Brush	Allow stains to dry thoroughly and then brush.
	Washable	(*b*) Soap and water	Wash in warm suds.
	Any	(*c*) Alcohol	Sponge the stain.
Paint and Varnish	Washable	(*a*) Soap and water	First scrape off the surface paint, then wash with soap and water.
	Any	(*b*) Turpentine or alcohol	Sponge the stains carefully or immerse the garment, changing the turpentine occasionally.
	Washable	(*c*) Turpentine and ammonia	Wet the stain with ammonia, and then apply turpentine. If the stains are old, soak in turpentine for several hours after applying ammonia, and then wash with soap and water.
	Any	(*d*) Carbon tetrachloride or chloroform	Sponge the stains or soak them. Paint stains that have become hardened are almost impossible to remove.

TABLE I—(*Continued*)

Stain	Material	Reagent	Method of Removal
Perspiration	Washable	(*a*) Soap and water	Wash with soap and water and place in the sun.
	Delicate	(*b*) Distilled water	Sponge with distilled water.
	Any	(*c*) Corn starch	For fresh stains, apply corn starch on the wrong side and brush off when dry.
	Washable	(*d*) Vinegar	Perspiration from the arm pits is alkaline. Sponging such stains with diluted vinegar will help to remove them; then wash in warm water.
	Any	(*e*) Chloroform	Sponge with chloroform to remove odor. As perspiration takes the color out of the material and weakens the fabric, it is almost impossible to repair the damage entirely. When the color has been taken out, it is advisable to dye the fabric, or if fashions permit, to recut the garment.
Rust......	White, washable	(*a*) Lemon juice	Spread the stain over a vessel of boiling water. Squeeze the lemon juice on the stain and allow it to remain a few minutes; then rinse in the hot water. Repeat the process several times.
	White, washable	(*b*) Lemon juice and salt	Moisten the stain with salt and lemon juice and place in the sun, adding lemon juice as it dries, or hold over the spout of a steaming teakettle.
	White, washable	(*c*) Cream of tartar	Cover the spot with cream of tartar and tie the material so that the cream of tartar will be held on the spot. Dip this into the hot water and allow it to stand a few minutes.
Salad Dressing	White, washable	(*a*) Soap and water	Wash as for ordinary laundering.
	Delicate	(*b*) Lukewarm water	Sponge with lukewarm water.

TABLE I—(*Continued*)

Stain	Material	Reagent	Method of Removal
Salad Dressing	Any	(*c*) Gasoline or any of the grease solvents	Wash fabric with lukewarm water, dry with soft cloth, and then sponge with a grease solvent. Note:—If fabric is discolored from the acid of the vinegar used in the dressing, treat as for acid stains.
Scorch	Washable	(*a*) Soap and water	Wash out quickly with lukewarm suds.
	Fast color, washable	(*b*) Sun bleaching	Wet the spot and then place in the sun to dry.
	Any	(*c*) Corn starch	Wet the scorched material and apply corn starch, rubbing it in well. Allow this to dry.
	Washable	(*d*) Whiting or pipe clay	Pour warm water on the stain, spread dry whiting or pipe clay over it, and leave a few hours. Rub gently in lukewarm water, rinse, and dry. Repeat, if necessary.
	White linen or cotton.	(*e*) Lemon juice and salt	Moisten salt with fresh lemon juice and apply to scorch stain. Rub in well and expose to sunlight. Repeat, if necessary.
	White linen or cotton	(*f*) Hydrogen peroxide and household ammonia	To a solution of hydrogen peroxide, add a few drops of household ammonia. Dip the scorched spot in this and work gently with the fingers until the stain disappears. Then rinse through several waters.
	Woolen	(*g*) Chalk	Wet the stain. Scrape common chalk to a powder, apply, and expose to the sun. If it dries quickly, this may have to be repeated.
	White flannel	(*h*) Lemon	This remedy must be used *at once*. Cut a lemon and rub both juice and pulp into the scorched spot. Then expose to strong sunlight. Leave until dry and wash out lemon.

TABLE I—(*Continued*)

Stain	Material	Reagent	Method of Removal
Shoe Polish (Black)	Washable	(*a*) Soap and warm water	Wash in warm suds.
	Washable	(*b*) Lard	If stains are old, rub lard or grease into fabric. Then wash in warm water and soap.
	Any	(*c*) Turpentine	If the polish is made with turpentine, then turpentine may be used to sponge the stain away.
	Washable	(*d*) Kerosene	Apply kerosene and then wash with soap-suds and warm water.
Shoe Polish (Tan)	Washable	(*a*) Soap and water	Wash in warm suds.
	Wool or silk	(*b*) Alcohol	Sponge stains with alcohol.
	Any	(*c*) Gasoline or any other grease solvent	Sponge the stain to remove any of the wax polishes; then sponge with water and wipe dry with a piece of soft cloth.
	Washable	(*d*) Kerosene	Apply kerosene and then wash with soap-suds and warm water.
Stove Polish	Washable	(*a*) Soap and water	Rub soap on stain well and wash thoroughly with water that is almost cold.
	Any	(*b*) Gasoline or any other grease solvent	Sponge the stain or immerse it and rub it gently between the hands. Note:—Stove polish is usually difficult to remove and should be attacked while fresh to have satisfactory results.
Sugar and Syrup	Washable	(*a*) Warm water and soap	Wash thoroughly.
	Delicate	(*b*) Distilled water	Sponge with distilled water.
Tar or Road Oil	Any	(*a*) Turpentine	Sponge stains or soak them in turpentine, rub gently with the hands, or with a small brush, to remove the stains, and follow by washing with soap and hot water, if the material will permit the use of water.

TABLE I—(*Continued*)

Stain	Material	Reagent	Method of Removal
Tar or Road Oil	Delicate	(*b*) Gasoline or any other grease solvent, such as chloroform or ether.	Sponge with grease solvent.
	Washable	(*c*) Lard	If the stain has hardened, rub lard or grease into the fabric well, wash with hot water and soap.
	Washable	(*d*) Kerosene	Same process as with lard.
Tea	Washable	(*a*) Soap and water	Rub soap on stain well, and wash in hot water or boil the article in strong soap water.
	Linen and cotton	(*b*) Borax	Cover the stain with borax and pour boiling water through. Soak in the borax water a few minutes if the stain is old.
	White, washable	(*c*) Lemon juice	Squeeze lemon juice on the stain and place in the sun. Apply fresh lemon juice as it dries.
	White cotton and linen	(*d*) Javelle water	Apply Javelle water as a last resort.
	Washable	(*e*) Glycerine	Rub the stained portion with a soft cloth dipped in glycerine; then wash in the usual way.
Toilet Water	Any	(*a*) Wood alcohol	Apply wood alcohol with tampon.
	Washable	(*b*) Water and hydrogen peroxide	Sponge with solution of 1 part water and 1 part hydrogen peroxide.
Tobacco	Washable	(*a*) Soap and water	Wash with warm water and soap and place in the sun.
	White, washable	(*b*) Lemon juice	Sponge with water, and then cover with lemon juice. Place in the sun and apply more juice as it dries.
	Any	(*c*) Wood alcohol	Sponge with wood alcohol.
	White linen or cotton	(*d*) Javelle water	Apply Javelle water.

TABLE I—(*Concluded*)

Stain	Material	Reagent	Method of Removal
Varnish		See *Paint.*	
Water Spots	Washable	(*a*) Water	Sponge entire surface evenly and avoid having it too wet. Then press.
	Silk, satin, and velvet	(*b*) Steam	Shake in dry steam. Have only a small quantity of water in the teakettle and tie a cloth over the spout. Keep the water boiling hard.
Whitewash		See *Alkali.*	
Wine		See *Fruit and Berries.*	

EQUIPMENT FOR DRY CLEANING

45. In cleaning establishments, the simplest tools and the simplest recipes are universally used. The same simplicity should be observed in cleaning that is done in the home, both in the equipment and the method of procedure. The equipment shown in Fig. 4 includes all that is required for dry cleaning at home. As this illustration shows, practically all of this equipment is found in the average home.

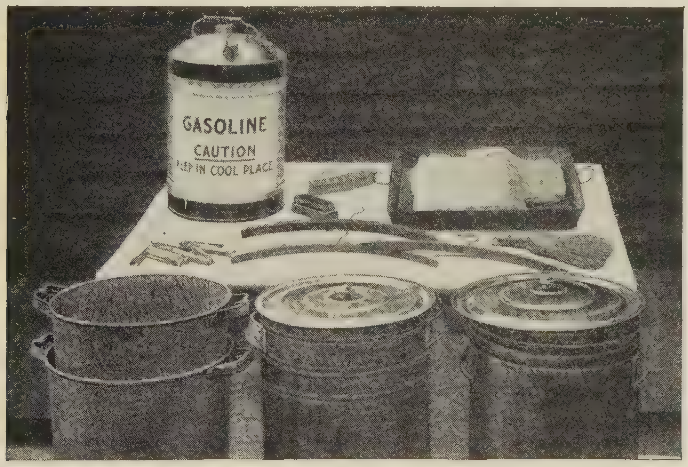


Fig. 4

There need be no hesitancy in using the kettles and jars that are in every woman's kitchen if, when the work is complete, they are scoured thoroughly and allowed to air so that the odor entirely disappears.

46. One of the secrets of successful home cleaning is to have *all working materials ready*, because gasoline, or any other cleaning fluid, evaporates rapidly and the process should not be delayed after it is once started. The articles that should be made ready are both listed and described.

3 or 4 vessels with tight-fitting lids
A large flat pan or a shallow sink
Table and chairs
Clothes hangers
Clothes-pins
Clothes-brushes or whisk-brooms
Bath towels
Cleaning fluid for bath
Dry-cleaning soap
Spotting reagents

47. **Vessels with well-fitting lids** are almost indispensable for home dry cleaning, as the lids prevent evaporation. The vessels should also be large enough to allow for the handling of the stuffs to be cleaned. They may be medium-size dish pans with large, tin covers made close-fitting by placing weights on top. Or, if considerable cleaning is to be done, large aluminum vessels or large stone pots, such as are used in the chemical industry, would be excellent. If there are only a few light articles to be cleaned, 2 or 3 half-gallon fruit jars will answer.

48. For spotting purposes, provide a **large, flat pan** of the dripper type. Or, if much cleaning is to be done, have a table with side pieces that extend above the level of the top. This forms a shallow sink when lined with zinc or tin. A hole may be bored in one corner, and a pipe connected to carry off the surplus cleaner.

49. A **table** and **two chairs,** or still better, two tables, will provide space for sorting the various garments and for working.

50. **Clothes hangers** and **clothes-pins** are generally required for drying purposes.

51. Clothes-brushes or **whisk-brooms** found in every home, if thoroughly cleaned, are quite satisfactory. If brushes must be purchased, fine whisk-brooms and brushes with unpainted backs are best. A small, soft brush is particularly desirable for scrubbing fabrics. Wire brushes should be avoided.

52. Bath towels are needed for drying the garments. These may be washed afterwards and need not be injured in any way by this work.

53. A **cleaning fluid,** for example *gasoline*, should be provided in sufficient quantity, depending on the articles to be cleaned, usually 3 to 6 gallons. Remember that this, after being used, may be strained and used again for washing dark fabrics. Unless treated by a special process to make it entirely clean, however, this strained gasoline should not be used for cleaning white or light-colored garments.

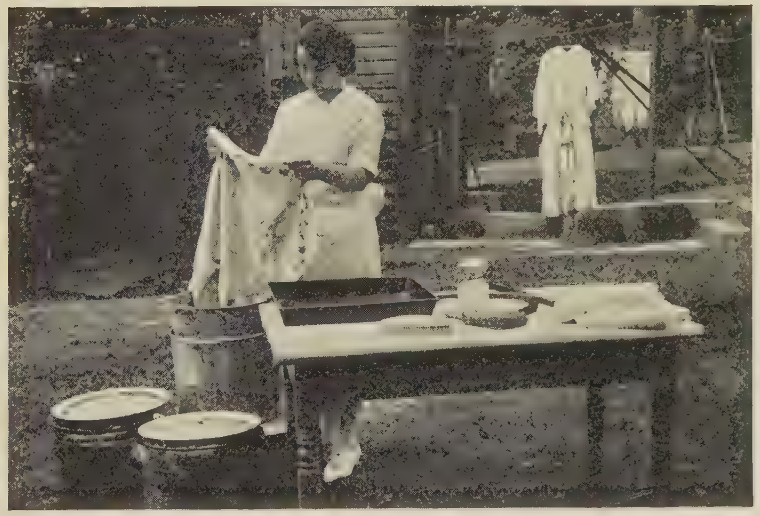


FIG. 5

Heated gasoline is a great help, the garments being cleaned more easily in it than in cold gasoline. To heat gasoline, put the vessel containing it into a larger vessel containing a few inches of boiling water, as shown in Fig. 5. Never attempt to heat gasoline by putting it near a fire or a flame, for it is highly inflammable.

54. The **soap** for dry cleaning must be carefully chosen. A soap made especially to use with gasoline may be purchased, but considerable time is required to make it ready, and it is generally used only in dry-cleaning establishments. *Putnam Dry Cleaner* is very satisfactory, however, for home cleaning and is obtainable in almost all drug stores. In using Putnam Dry Cleaner or anything similar, put it into the gasoline that is used for the first washing.

DRY-CLEANING PROCESSES

PRECAUTIONS

55. Before any woman attempts to use gasoline or a similar cleaning agent, she must familiarize herself with several precautions in order both to make the cleaning process safe and to secure good results. These precautions, which are not difficult to understand nor observe, should be kept in mind all during the cleaning of a garment.

56. Overcoming Danger.—The danger in using inflammable materials may be entirely eliminated by careful handling. Thousands of gallons of such materials are used daily with safety by those persons who understand the combustible nature of cleaning fluids and who exercise the necessary precautions.

Avoid heat when using inflammable cleaning materials by working out of doors in the shade, or by an open window in an unheated room.

Avoid placing near a fire or light, or pressing with a hot iron, garments cleaned with inflammable materials. The garment should be allowed to dry first.

Avoid having on hand a supply of inflammable cleaning fluid unless there is a basement or outside storehouse where it may *keep cool.*

Do not inhale the fumes of ether, chloroform, and carbon tetrachloride, as they have a sleep-producing effect.

57. Overcoming Strong Odors.—Some cleaning agents have unpleasant or unhealthful odors, but if the following suggestions are noted these agents may be used in such a way that this objection is negligible.

Choose a bright, clear day so that quick evaporation will be possible.

Work out of doors and let the fresh air carry away the odor.

Work rapidly, having all materials assembled, as shown in Fig. 4.

Neutralize unpleasant odors by adding a few drops of oil of sassafras, mixing the oil with the last bath.

For removing the after-odor from garments, it is necessary only to *allow sufficient time for the agent to evaporate.* After a garment has dried, evaporation may be quickened by means of heat supplied by pressing with a moderately hot iron, by hanging the garment in the sun (if this will not affect the color), or by placing it somewhat near a radiator or heater.

58. Securing Better Results.—The poor results sometimes obtained after expending considerable time on dry cleaning have caused some amateur cleaners to become discouraged. The reason for these poor results is either that too little gasoline has been used or that the garment has not been rinsed well.

To secure good results, therefore, *provide several gallons of gasoline* for cleaning day. Dry cleaning requires only a third less cleaning fluid than the amount of water that a laundress would use if she were washing the garments. This is not an extravagant plan because a number of garments may be cleaned at one time, and the used gasoline may be strained, after the dirt has been allowed to settle, and preserved for the next cleaning day.

Also, *remove the gasoline thoroughly* from the articles so that it is not allowed to run and cause streaks in the fabric. To avoid streaking, *use heavy towels to press out some of the moisture.*

59. Protecting the Hands.—The fact that gasoline is hard on the hands has in some instances caused home cleaning to be avoided, but this may very easily be prevented.

Apply glycerin or some good hand lotion as soon as the hands are taken out of the gasoline. Soap should never be used until the skin has been thus softened.

Use long rubber gloves for protection when cleaning with gasoline or another cleaning oil.

DRY-CLEANING PROGRAM

60. Just as the work of wet washing is facilitated and good results are made more likely by a definite and systematic program, so the work of dry cleaning is made easier and more successful if a good program is adopted. For this purpose, the following processes are mentioned here in chronological order. Detailed explanations of them are given in other parts of the chapter.

1. Sort clothes as to color.
2. Examine nature of spots.
3. Mark with thread any that will be hard to see.
4. Provide cleaning agents that will be needed.
5. Set up the equipment out of doors in the shade or indoors in a well-ventilated room where there is no heat nor artificial light.
6. Brush garments, turning pockets and folds inside out.
7. Remove spots.
8. Wash light-colored batch of clothes in vessel 1 and put in vessel 2.
9. Wash medium-colored batch in vessel 1, shift first batch to vessel 3 and second batch to vessel 2.
10. Wash dark-colored batch in vessel 1, hang up batch 1, shift second batch to vessel 3 and third batch to vessel 2.
11. Remove any spots that show up after the first bath.
12. Finish rinsing and drying second and third batches, using bath towels to absorb part of the moisture and then hanging garments in the air.
13. After the absorbent has evaporated, either press garments, using a cloth so as not to cause shine to appear, or steam garments if the fabric requires steaming.
14. Air garments thoroughly.

METHOD OF PROCEDURE

61. Sorting.—After choosing a favorable day for dry cleaning, proceed to sort the soiled articles. These should be spread out on a table in groups; first, the light ones, then those of medium color, and last the dark ones, as shown in Fig. 6.

During the sorting, cleaning may be simplified by marking with a white thread all spots on dark fabrics. This plan makes it possible for the person doing the cleaning to find all spots easily so that none will escape cleaning and show up after the garment has dried.

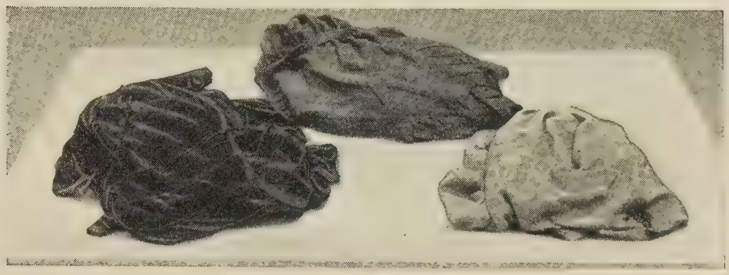


FIG. 6

Since gasoline and similar oils destroy the luster of buttons and buckles, if these have not been previously removed, they should be taken off garments at this time.

62. Brushing.—The next step is to remove as much dust as possible. Shake everything thoroughly or, with a smooth switch, gently beat the fabric, preferably on a padded surface. Also, turn all pockets inside out and brush, as shown in Fig. 7.

63. Spotting.—Now you are ready for spotting, which is of greatest importance. Choose from Table I the correct stain remover for the spot to be removed and follow the method of procedure given in this table, as well as the more detailed directions in Arts. 32 to 44 that apply to the particular reagent required. Follow several methods, if necessary, until all traces of stains have disappeared.

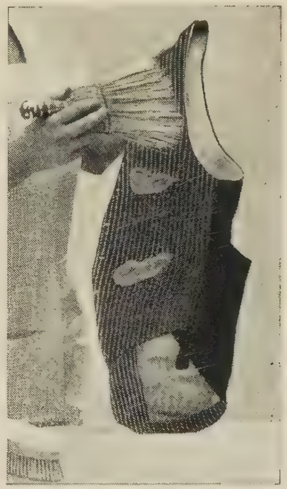


FIG. 7

64. Order of Washing.—Use 3 or 4 vessels with lids, as explained; 3 are sufficient if the garments are not very soiled. Fill each one one-half to three-quarters full of gasoline, if that is the cleaner you have chosen, and put the first vessel into a larger one of very hot water to heat. If dry-cleaning soap is used, put it in the first vessel.

Wash in vessel No. 1 the articles in the first pile, those lightest in color. Place them in vessel No. 2, allowing them to drip while in your hands, and cover vessel No. 2. Then thoroughly wash in vessel No. 1 the next lot, those of medium color. In the meanwhile, put the articles from vessel No. 2 into No. 3. Now lift the articles from No. 1, allow them to drip a little while in your hands, and place them in vessel No. 2. Then commence washing the third lot in vessel No. 1.

This changing of articles from one vessel to another is done for the purpose of always bringing the first lot, the light pieces, into contact with the clean gasoline.

65. Cautions in Washing.—During washing, *do not rub the garments, but rather work them up and down* in the liquid and squeeze it through the fabric gently. This procedure will keep the material free from wrinkles and be an aid in pressing. Also, it is easier on the fibers.

Do not let any part of the article dry until the whole has been cleaned, for in this lies the secret of successful cleaning with gasoline. To prevent material from drying and at the same time to work on the spots as the garments are taken from one bath to the other, use a large, flat pan, or the sink arrangement described in Art. **48.** Place flat on the bottom of the pan, or sink, the part of the garment in which the spot shows, and work on it there.

The object in placing the garment in either of these receptacles while working on it to remove spots, is to keep the garment wet instead of having to squeeze out the fluid when the garment is removed from one bath preparatory to being placed in another. If put into the pan or shallow sink while still dripping wet, parts of the garment will not become dry and cause marks to form.

Before cleaning a one-piece dress, it is better for the amateur to rip the skirt and waist apart, if possible. It may be awkward to manage otherwise, as part of it may become dry before the remaining portion is cleaned.

66. Rinsing.—*Rinse thoroughly* in the last vessel the articles first treated and then spread them upon the table and examine. If dirty pieces are still found, rub the articles with a clean tampon dipped in gasoline or alcohol. If desired, as the garments come out of the last rinse, place them in a vessel in which the adhering gasoline will drain off while you are washing other articles.

67. Drying.—*Never wring garments* to free them from dry-cleaning liquids, or you will cause streaking and wrinkling. *Press out some of the moisture gently with the hands*, and, when garments are not too bulky, *place them between two heavy bath towels* to absorb the surplus. Dresses, blouses, jackets, and the like should be placed on hangers where they can be allowed to drip. For the drying and evaporating process, 36 hours is the time recommended by professionals.

Frequently a garment is not cleaned until time to wear it. As a general rule, this should be avoided because there is great danger in wearing a garment too soon after cleaning. But if it is necessary to wear it 10 or 12 hours after cleaning, hang the garment in a warm place after it is dry and the heat will remove the odor and help to absorb the cleaner more quickly.

PRESSING

EQUIPMENT FOR PRESSING

68. Pressing gives the finishing touch to dry-cleaned garments, so it is essential that the work be done correctly. Too much stress cannot be laid on the warning not to rub the iron back and forth, but to run it over the garment but once. If the iron is sufficiently heavy, one pressing will be quite enough, but if it is light and must be rubbed back and forth, extra precautions must be taken or an ugly shine will result. Since dry-cleaned garments become shiny so easily, using press cloths becomes an actual necessity.

69. If one is properly equipped to handle such work, pressing may be done as a business. Such equipment does not consist of unusual articles, but of such as will produce good work in the shortest possible time.

Irons are of chief importance, and regardless of whether electricity, gas, or coal heat is used, the irons should be heavy tailors' irons, weighing from 16 to 20 pounds to be most suitable.

The **ironing board** must be very firm, well padded, and adjusted to a convenient height.

Press cloths should be large enough to cover all garments well, $1\frac{1}{4}$ yards of soft, unbleached muslin that has been boiled to remove filling being preferable. A special, clean cloth should always be kept for pressing white or light-colored materials.

A **sponge** or **small soft brush** and a **shallow pan** to hold water to dampen the press cloth or parts of a garment are advisable.

A **sleeve board** and a **ham cushion** or **pressing pad** are also helpful. The ham cushion is made of firm material in the shape of a ham and filled tightly with sawdust, or small scraps of cloth. It is used to press any rounded surfaces, such as fronts that are shaped over the bust and trouser tops.

METHOD OF PRESSING

70. The suggestions for ironing in Arts. **107** to **115,** *Home Laundering*, apply to all simple garments, but for tailored dresses, coats, and trousers, special treatment is necessary to give satisfactory results. The long, sweeping movements of the iron in ironing are not applicable to pressing, for they are likely to stretch the pliant fibers of some materials. Instead, the iron should be worked over small surfaces at a time with a motion away from you and gradually toward the bottom of the garment. Since tailored garments have few or no gathers, it is not necessary to press toward the gathers as in other garments.

Although pressing is considered the principal method of finishing, steaming is very often employed, especially for materials that are likely to become shiny with the application of heat with pressure. The processes of steaming are fully described in Arts. **80** to **83,** inclusive.

71. Hard-Finished Material.—To press hard-finished material, lay it out flat. Dampen the press cloth; then wring as dry as possible and shake to distribute the moisture thoroughly. Place the press cloth on top of the material and press hard with the iron, keeping it in motion so that it will not leave marks on the material. Continue until the press cloth is dry.

72. Soft-Finished Material.—Soft-finished material, especially in blue, black, or other dark colors, requires a little different treatment in pressing, as there is danger of its becoming glossy. Place a slightly dampened press cloth over the material and press lightly with the iron until the press cloth is almost dry. If the material should become glossy, remove such marks by steaming.

73. Material With a Nap.—Material with a nap must have careful consideration in pressing. Dampen the press cloth, but do not have it too wet. Place over the material and press lightly, moving the iron always in the same direction; that is, with the nap of the material. If the material is not pressed in this way, it will have a rough surface. If the material is hung in the open air after pressing, the nap will be raised, thus giving it a softer finish.

74. Pile Fabrics.—Fabrics having a deep pile should be steamed rather than pressed, as pressing will flatten the surface. Follow one of the methods of steaming given here.

STEAMING

EQUIPMENT FOR STEAMING

75. Steam will be found to be a good friend to any one who wishes to clean and freshen old material, or to remove wrinkles from garments. It is extensively used also to restore ostrich feathers.

Steam used for renovating purposes is known as *dry steam;* that is, it is made by using considerable heat and very little moisture.

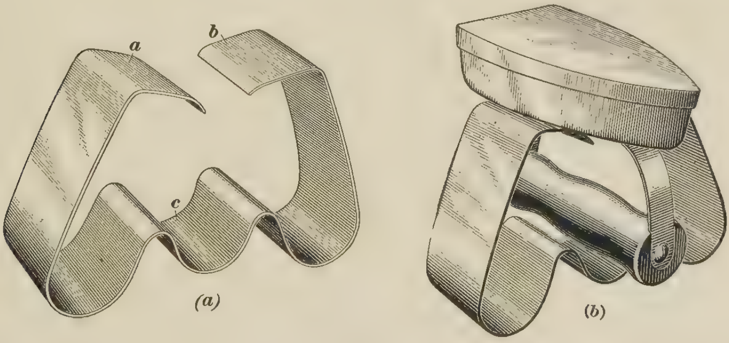


FIG. 8

76. Iron Holders for Steaming.—Special small steamers are manufactured, but it is not always possible to obtain a steamer just when it is most needed. Consequently, it is sometimes necessary to construct a home-made affair to do this work.

Place two bricks on the table, side by side and $1\frac{1}{2}$ inches apart. Heat an iron on the stove, place it bottom side up on the two bricks with the handle down in the space between them. This, however, is a rather makeshift arrangement and, as it is none too firm, would not prove satisfactory for any one expecting to do a great deal of steaming.

77. If desired, a special holder for the iron may be purchased at small cost. One form of holder is illustrated in Fig. 8 (*a*). This consists of a strip of sheet steel about 2 inches wide bent into the form shown. The iron is inverted and placed so as to rest on the parts *a* and *b*, its handle extending down into the groove *c*. An iron in place on the holder is shown in (*b*).

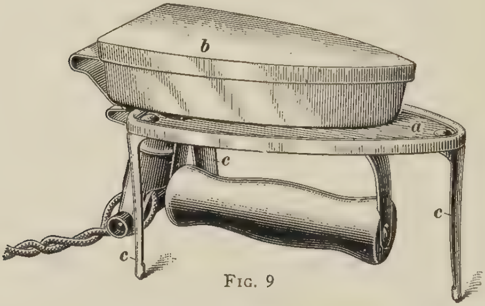


Fig. 9

78. Another form of holder, of somewhat better construction and intended for use with an electric iron, is shown in Fig. 9. The flat top *a* has the shape of the iron *b*, and a slot is cut in the center of it to allow the handle of the iron to be slipped in. It is supported on three legs *c* that are riveted to the top *a*.

79. Teakettle.—To furnish the thin, dry kind of steam, any ordinary teakettle is satisfactory. There are steam spreaders to be attached to the spout, but these are unnecessary. Good results can be secured without them.

STEAMING PROCESSES

80. Steaming Garments.—For a simple method, place a very damp cloth of single thickness on the garment. Then run the iron above the wet cloth and the garment, holding it very close to the wet cloth but not placing any weight on the iron.

The process of steaming is reversed when a small article, a small section of a large article or garment, or a piece of material is to be steamed. Place a damp cloth, folded into several thicknesses, directly on the hot iron and place a dry cloth over it. Then, as shown in Fig.

10, draw the material lightly over this so that the steam penetrates it. To assist in the steaming process, brush the material lightly if it is a woolen material without nap or with a nap that will not be injured by the brushing.

It is an advantage if there are two persons to do this work. One may hold the material while the other brushes it with light, short strokes. Brush against the nap to raise the pile of the fabric. As a last step, remove the wet cloth and hold the material for a moment or two over the dry heat to absorb the moisture.

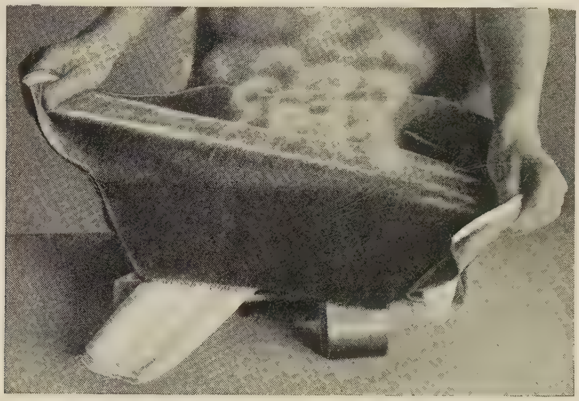


FIG. 10

81. A method that works on the same principle as the preceding one, but uses a teakettle instead of a hot iron to create steam, is the following one:

Place a teakettle on the stove and cover the bottom of the kettle with water to the depth of about 1 inch. As soon as the steam emerges from the spout, shake the garment in the cloud of steam for a few seconds, or until the garment becomes damp enough to lose its wrinkles but not its shape. In the case of pile fabrics, brushing, as described in Art. **80**, gives added results, but care must be taken not to brush vigorously nor while the fabric contains much steam.

Steaming according to this method is applicable to small articles or larger ones having wrinkled places, in need of special treatment.

82. The bathroom may sometimes be used to steam garments. Hang the garment in the bathroom by the top, close any windows or doors, and run enough hot water in the tub to fill the room with steam. Let the garment hang until the steam has cooled. Then open two windows, or a window and a door, to allow a free circulation of air, but do not handle the garment until it has thoroughly dried.

83. **Lifting the Nap on Pile Fabrics.**—When restoring pile fabrics such as velvet, plush, duvetyn, etc., a good plan is to have a soft brush and a small piece of hose that fits into or over the mouth of a teakettle. Have the water boiling all the while, and with the steam coming through the hose, run it over the garment, which may be laid out on a table or hung on a hanger, and as the steam is put over the garment, brush gently but continuously. Using the steaming and brushing processes together in this way is much more effective than using either one separately.

The precaution necessary in the use of this method is to take care not to allow drops of moisture, which are likely to collect on the end of such a hose, to fall onto the garment. To guard against this, a piece of cloth may be tied over the mouth of the hose.

84. **Steaming Feathers.**—Ostrich feathers, aigrettes, or fancy feathers, which have lost their newness, should be steamed, but care must be taken not to steam them too much or they will lose their curl. Shake the feather in a cloud of steam for a few seconds and it will unfold and become fluffy and light.

CLEANING SPECIAL ARTICLES

FURS

85. Although silk and wool materials may be thoroughly washed by putting them through several gasoline baths and rubbing the spots as the work is proceeded with, it will be found that some very delicate fabrics might be injured by such handling. Again, it would not be practical to immerse some articles, such as furs, heavy coats, or mattresses, in gasoline. Such things may be surface cleaned very satisfactorily.

86. **Cleaning White Plush and Fur.**—A thin paste of gasoline and common wheat flour can be used for washing white beaver, white plush, and white fur. To make the paste, pour a pint of

gasoline into a clean china bowl and put into it 2 tablespoonfuls of white flour. Stir the mixture until a thin, even paste is formed and then wash in it the materials that are to be cleaned. An oblong, shallow pan, such as a roasting or baking pan, makes the best container.

When the washing is finished, dry the materials thoroughly, first squeezing out as much as possible of the gasoline. Then brush the white fur or white plush with a stiff-bristle brush. However, if the fur is of the long-hair variety, it should be combed.

87. Cleaning Colored Furs With Bran.—Fur of any color may be cleaned with dry bran. Purchase a pound of clean bran at any feed store. Put it in a dry pan and set it inside the oven until it becomes heated to such a temperature that the hand cannot be held in it with comfort, as this insures its being thoroughly dry. Stretch the fur on an ironing board and hold it in place by pins set fairly close together, so that it is firmly fastened to the board. Brush the fur with a stiff-bristle brush, rub in thoroughly the heated bran, and brush again to remove the surplus bran. Then unpin the fur and shake it well to remove all evidences of the bran.

This method not only cleans the fur but makes it glossy. It can be applied to plush also, but plush requires an additional steaming process before the nap is sufficiently freshened.

88. Cleaning Furs With Corn-Meal.—Furs may be cleaned with corn-meal in the same way as with bran. Use white corn-meal for white or light furs; for darker furs, yellow is satisfactory. Heat the meal so that it is thoroughly dried and cover the fur with it. Let it stand 10 or 15 minutes and then take it out by brushing and shaking the fur thoroughly. Then put the fur out in the air.

89. Cleaning Furs With Fullers' Earth.—Fullers' earth is often used for cleaning furs, especially when they are very soiled. Use the fullers' earth as any of the other absorbents.

90. Cleaning Furs With Gasoline.—If absorbents are not effective, furs may first be put through the gasoline baths and then, after drying, treated with corn-meal. It must be remembered that furs cleaned in gasoline must be subjected to heat after evaporation for a greater length of time than fabrics in order to deodorize them thoroughly.

91. Cleaning Furs With Commercial Preparations.—Besides the simple, home methods that have been described, there are commercial preparations that may be bought from any drug store and used successfully according to the directions that accompany them.

GLOVES

92. Cleaning Kid Gloves.—Kid gloves that are not seriously discolored or stained with perspiration may be easily cleaned by immersing in several gasoline baths, as for garment cleaning, but, if necessary, they may be handled more vigorously than fabrics.

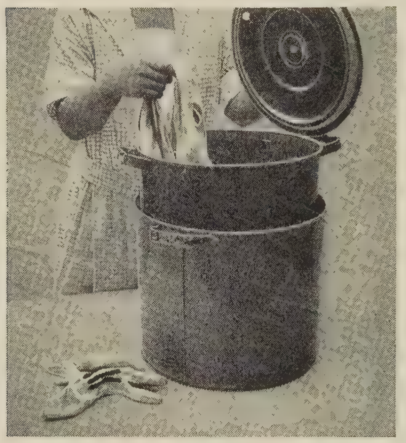


Fig. 11

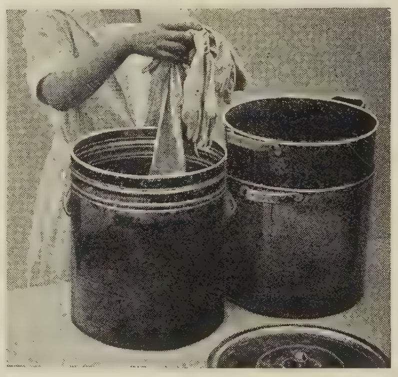


Fig. 12

Fig. 11 shows the warm, gasoline, soap bath in which the gloves are first immersed. Allow them to remain in this bath a few hours to loosen the dirt; then rub between the hands and scrub with a stiff brush, as in Figs. 12 and 13, or rub on a small washboard. Next, rinse thoroughly and wipe with a soft cloth. If necessary, dry further with Turkish towels, as in Fig. 14, and put on glove stretchers. Gloves should not be dried too rapidly, as this tends to make them stiff, but they may be dried as much as possible with towels and then laid in a warm place to finish drying. When thoroughly dry, shape them carefully and smooth them with the hands, as illustrated in Fig. 15.

Water stains on kid gloves are difficult to remove successfully, but by treatment in the gasoline, they may be somewhat lessened.

Perspiration stains cannot be removed with any assurance of good results.

93. Cleaning Chamois and Doeskin Gloves.—Chamois and doeskin gloves may be washed on the hands with pure, mild soap or soap flakes and lukewarm water, but they require great care in laundering to have them soft and pliable when dry. The more soap constantly used in the water, the softer and more silky will the gloves appear.

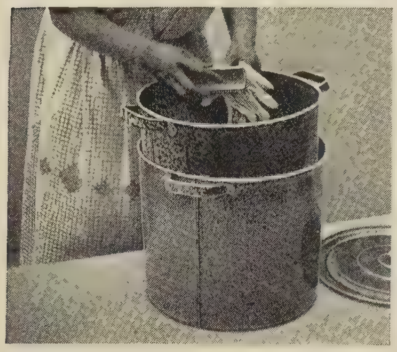


FIG. 13

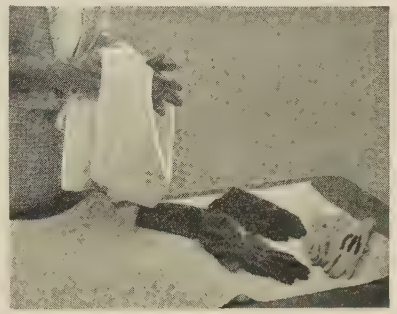


FIG. 14

Free the dirt in a soapy bath and then put the gloves through several lukewarm rinse waters. In the last one, dissolve enough soap flakes or pure soap to make the water look milky. Without twisting, squeeze as dry as possible in a towel. Pull the gloves into shape carefully and smooth out the fingers by blowing into them. Finish the drying by spreading the gloves flat on a dry towel.

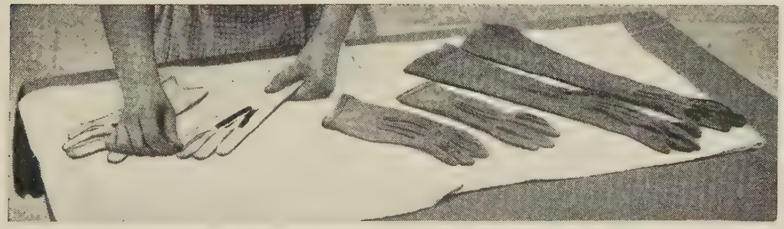


FIG. 15

Never hang such gloves in the sun or near the heat, for they are likely to dry too quickly and become hard.

94. Cleaning Buckskin Gloves.—Buckskin gloves may be washed with pure white soap and water or in gasoline. The latter is perhaps more satisfactory unless the gloves are of very good quality. A brush with very stiff bristles should be used to cleanse them thoroughly.

95. Cleaning Washable Kid.—Put gloves of this kind on the hands and wash them in suds made with pure white soap or soap flakes and lukewarm water. Rinse thoroughly and dry them slowly. When dry, rub a little talcum powder into the gloves to restore the soft finish.

HATS

96. Hats represent a special branch of cleaning, and come properly under the head of millinery renovating. For home use, however, the following simple suggestions will be found of value.

97. Cleaning White or Light Felt Hats.—First brush white or light felt hats thoroughly, then go over the surface lightly with fine sandpaper. If very soiled, use gasoline and a light woolen cloth and rub the felt well. Then, brush and shape with the hands.

Still another method is to make a paste of powdered magnesia and water and spread it over the hat. This may be brushed off when thoroughly dry.

White, also colored, beaver hats may be cleaned with wood alcohol applied with a soft brush.

98. Cleaning Straw Hats With Oxalic Acid.—Hats made of milan, hemp, panama, and rough straw braids in natural colors may be cleaned by using a weak solution of oxalic acid.

To prepare an oxalic solution sufficiently strong for a badly sunburnt hat, dissolve 1 tablespoonful of oxalic acid in 1 pint of water, a process that will require from 15 to 20 minutes. When the acid is dissolved completely, pour 1 teaspoonful of the solution on a clean pine board. If it foams, or forms bubbles, it is too strong and should be weakened. Add more water and test the solution again. As soon as it fails to foam, it is of the correct strength.

99. While cleaning a hat by this method, do not put the hands in the acid solution. Use a small white-bristle scrubbing brush and scrub the hat quickly, beginning at the center of the crown and rubbing around and around until the side crown is reached; then continue around the side crown and on to the brim, rubbing the brush in a circle and in the same direction all the time.

Rinse the straw quickly with clean water, using the same brush for this purpose. Place the hat in the air or in the sunlight so that it will dry. The work must be done quickly in order that the straw may not become too damp and puff up. When the hat is perfectly dry, press it into shape under a damp cloth, using a hot iron. The ironing board used for this purpose should be heavily padded and the pressing should be done very lightly; otherwise, the imprint of the iron will flatten the straw. The damp cloth used should be lintless, if possible.

100. Cleaning Men's Straw Hats With Salts of Lemon.—Straw hats may be cleaned in a solution of 1 tablespoonful of salts of lemon to ½ pint of water. Dissolve by boiling, and after the solution cools apply to the hat with a firm brush, starting at the top. Dry with a soft cloth. Do not allow this cleaner to touch the sweat band, as it will harden the leather.

101. Bleaching Straw Hats.—To bleach a straw hat, make a paste by adding to the juice of 1 lemon enough powdered sulphur to make it smooth. Cover the hat well and put it in the sun until dry. Then brush with a fine brush dipped in water and wipe with a dry cloth.

102. Dressing a Straw Hat.—To give a glossy finish or to stiffen a straw hat, apply a solution of 1 part transparent shellac to 5 parts wood alcohol.

FEATHERS

103. Cleaning White or Light-Colored Feathers.—When cleaning feathers, aigrettes, and paradise plumes that are white or light in color, a large china or earthenware bowl, as shown in Fig. 16, should be used. Dry the bowl thoroughly, and pour into it a pint of clean gasoline. Wash the feather by sousing it up and down thoroughly.

It is generally unnecessary to rub the flues of the feathers, but if you do rub them, start at the point where the flues are joined to the stem of the feather and move the tips of the fingers outwards along the flues, pressing lightly. When the tips of the flues are reached, lift the hand and start again at the stem. Do not rub the flues back and forth, but move the fingers always in the same direction; that is, outwards from the stem to the tips of the flues.

Continue the operation until all of the flues on both sides of the stem are washed clean. Then pick up the feather and draw it through the lightly closed fist, in the manner shown in Fig. 16, in order to squeeze out most of the gasoline from the flues. Repeat this operation several times, until the greater part of the gasoline has been squeezed out.

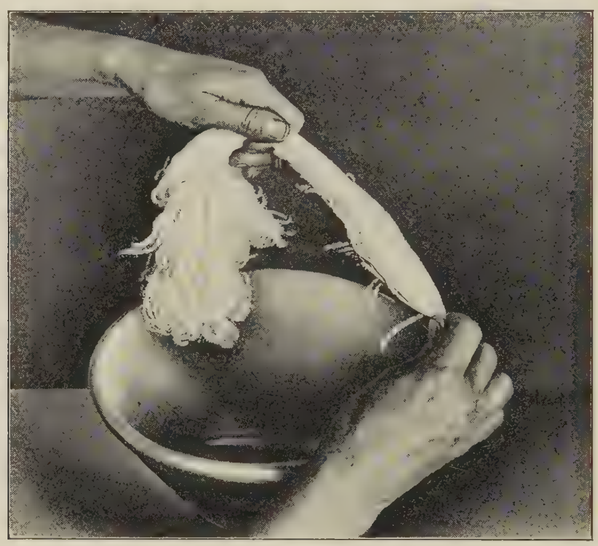


Fig. 16

104. When the feather has been washed thoroughly in the manner just described, throw away the dirty gasoline used for washing it, and wipe the bowl clean and dry. Pour in a pint of fresh gasoline, and to it add 2 tablespoonfuls of wheat flour. Stir the flour into the gasoline until a smooth, thin paste is formed. Then stir the feather around or lay it in the paste and rub the flues lightly from the stem toward the ends with the tips of the fingers, in exactly the same manner as described for cleaning the feather the first time. When the feather has been washed completely in this way, draw it through the closed hand to squeeze out the gasoline, and shake it in the air until the remaining gasoline has evaporated and the feather is almost dry, a process that will require from 2 to 5 minutes.

105. When the feather is practically dry, it must be rolled in clean corn starch. To do this, spread a piece of tissue paper flat on the table and sprinkle it lightly but evenly with corn starch. Roll the feather back and forth in the corn starch by twisting the stem until it is well covered. Then shake the feather to remove the loose particles of starch adhering to the flues, and the cleaning process is finished.

The advantage of this method of cleaning is that it will not take the curl out of the feather, as in the case of soap and water, but it must be remembered that this process is for cleaning white and light-colored feathers only.

106. Cleaning Black or Dark-Colored Feathers.—As gasoline affects some dark colors, feathers or plumes that are dyed with black, or with other dark dyes, must be washed in wood alcohol instead of gasoline. The method of washing, however, is exactly the same as that described for gasoline, except that the feathers are not put through a flour paste, nor are they rolled in corn starch after they are dry, as the white starch would show plainly on the dark flues.

107. Cleaning Feathers With Soap and Water.—It is possible to clean feathers with soap and water, if desired, but in doing so all the curl will be taken out of the flues, so that the feathers will have to be curled again when dry. Yet this is perhaps the favorite method of cleaning white feathers.

To clean a white feather in this way, make a good suds of warm water and pure soap or soap flakes. Wash the feather in this according to the method described for washing in gasoline, omitting the flour paste. Then rinse in two or three changes of clean water, the last one being slightly blued. When the drying is practically complete, roll the feather in clean corn starch to give weight to the flues. Shake off part of the starch, and the flues are ready to be steamed and curled.

Paradise aigrettes also may be cleaned successfully by this method.

108. Cleaning Feather Banding.—Feather banding cannot be successfully cleaned unless the feathers are attached by a woven process or by stitching. Pasted banding cannot be renovated. To clean feather banding, either the method for cleaning white or light-colored feathers or that for cleaning black or dark-colored feathers may be employed, according to the color of the banding.

VELVET

109. Preliminary Precautions.—Velvet may be put through the gasoline baths if very soiled, but since it takes such fabric a long time to dry, surface cleaning is usually better for it.

A mistake many women make in the effort to restore the appearance of velvet is their failure to realize that it must be cleaned before it is steamed. Failure to clean velvet accounts for the dull and rather smeary appearance of the collars of overcoats and suits cleaned at home.

The first thing, then, to do in cleaning velvet is to remove all dust by beating it gently on a padded surface or by brushing. A brush with firm bristles that are not too stiff should be used, a cheap hair brush being satisfactory if kept for no other purpose. Also, to remove surface lint only, a roll of old velvet made into a little pad about 5 by 2 inches makes a splendid brush. After brushing, beat gently once more and the velvet is then ready for the actual cleaning.

110. Cleaning Silk Velvet.—In order that silk velvet may be cleaned easily and quickly, it must be flat and smooth; therefore, lay the piece on the top of an ironing board, stretch it so as to remove all wrinkles, and pin it on all four edges to the cloth covering of the ironing board.

The actual cleaning is done generally with chloroform applied by means of a small sponge. Pour a few drops of chloroform on the sponge and rub it carefully over the pile of the velvet. The chloroform will evaporate very rapidly, so, as soon as the sponge becomes dry, pour on a few more drops and proceed as before. In addition to removing stains and spots, this method of cleaning will restore the color of the velvet to a certain extent. In using chloroform, remember to do the work out of doors, on a porch, or near an open window, never in a closed room.

Wood alcohol or one of the other spotting agents may be used instead of chloroform with good results, alcohol being the best for dark colors.

Whatever solvent you use, do not consider the velvet cleaned until you have steamed it. This process, together with the gentle brushing you give the velvet during the steaming, will raise the nap.

111. Cleaning Cotton Velvet.—Dark, cotton velvet and corduroy may be cleaned by the use of solvents, but white or light-colored, cotton velvet and corduroy generally must be wet cleaned. Before they are subjected to the soap bath, they must be well brushed. They may be washed by hand or in a washing machine, as explained in Art. **160,** *Home Laundering*. If the material is white cotton velvet or corduroy and it needs bleaching, use Javelle water, but do not use it if there is any silk in the material, as it will harm the silk fiber.

SILKS

112. Cleaning Silk With Absorbents.—If the soil on silk is fresh and partakes of the nature of grease or coloring matter or some stain made by cocoa, for instance, which contains both grease and color, it may be removed by French chalk, fullers' earth, powdered magnesia, starch, pipe clay, bran, or salt. The absorbent should be warmed before being applied, as the heat loosens the grease more quickly.

Lay the silk on clean paper and cover it with the absorbent, or put it between two layers of the absorbent. If the powder takes up much dirt immediately, scrape it off and apply a fresh supply. Otherwise, lay the silk away for a day or two; then shake and brush out the powder. It is surprising what dark, ugly marks can be removed in this simple way.

113. Cleaning Satin.—Satin of good quality may be cleaned very satisfactorily. Make a weak solution of borax by dissolving 1 tablespoonful of powdered borax in 1 quart of water. Stretch the satin on top of the ironing board or the work table and sponge it lightly, dipping the sponge into the borax solution and rubbing always with the grain of the satin and not across it. When the satin has dried, iron it on the wrong side only.

This process is excellent for cleaning, but will not restore the color. If there are grease spots on the satin, they should be removed by a stain remover or an absorbent previous to sponging.

RIBBONS

114. Renovating Velvet Ribbons.—To renovate velvet ribbons, first brush out all dust and then sponge the wrong side with 1 part of ammonia to 3 parts of water, or with the solvents mentioned for cleaning piece velvet. The ribbon is then ready to be steamed according to one of the methods described in Arts. **80** and **81** for steaming velvet.

115. Cleaning Colored Silk Ribbons.—Gasoline usually produces good results in the cleansing of colored silk ribbons. Either sponge or dip the ribbon; then lay it between layers of Turkish toweling and take out as much moisture as possible. Press on the wrong side first, with a soft muslin cloth over it, and then without the cloth. Never press ribbon on the right side.

116. Washing Ribbons.—Although soap-and-water washing is not precisely a dry-cleaning process, it is a safe method of cleaning ribbons of good quality. These can be washed in warm suds of soft water and soap jelly or soap flakes. Rinse in clean, soft water and hang up to dry without squeezing or wringing so as to avoid creases. Iron while damp, first with a cloth over them, and then without.

117. Sponging Ribbons.—Another method of wet washing ribbon is to spread the ribbon flat on a smooth hard surface, like a table top or a marble slab, and sponge or brush with lukewarm water in which a little mild soap has been dissolved. Rinse by holding the ribbon stretched between the hands and passing it through a bowl of clear water of the same temperature. Dry by spreading it out straight and flat on a smooth, hard surface. Draw the hand gently over it to press out air bubbles, which may have formed under the ribbon and would make it look "blistered" when dry. No pressing will be necessary.

LACES

118. Cleaning With Solvents.—As laces are very delicate, they should not be handled more than is necessary in cleaning them. Very fine laces should be basted to muslin, as described in Art. **141,** *Home Laundering*, and washed thoroughly in gasoline. The same precautions should be taken in order to keep them from having any delicate fibers broken. Shaking in a fruit jar, as explained in Art. **140,** *Home Laundering*, is a very satisfactory method.

Alcohol, carbon tetrachloride, or a similar solvent may be used instead of gasoline.

119. Cleaning With Absorbents.—A very simple way to clean laces that have become greasy or spotted by something containing oils or fats is to lay them in French chalk, powdered magnesia, or one of the other absorbents. Quicker action and better results are obtained if the powder is heated. Allow the lace to remain in the powder for a day or two before shaking it.

120. Cleaning Gold and Silver Laces.—It is possible to brighten metal laces by putting them through a gasoline bath, but it is not possible to restore them entirely. Wash the laces carefully in the gasoline and then lay them flat and rub them with soft cheesecloth that has been dipped in alcohol.

121. Cleaning Chiffon, Veiling, and Silk Net.—Such sheer fabrics as chiffon, veiling, and silk net are best cleaned by being left in a covered fruit jar partly filled with gasoline for an hour or so. Remove the article without disturbing the dirt that will settle at the bottom of the jar. Dip in clean gasoline and roll in a towel to dry.

MISCELLANEOUS ARTICLES

122. Mattresses, Bolsters, and Pillows.—When mattresses become spotted or soiled, they may be cleaned by washing the surfaces with warm water and Ivory soap, using a soft brush. Allow one side of the mattress to dry before washing the other side.

In the case of bolsters and pillows, also, lukewarm water with a good suds of Ivory soap makes the most effective cleaning method. Add 2 tablespoonfuls of ammonia to a tub of water; then dip and squeeze and turn the pillows or bolster until clean. Rinse well in clear water and hang in the sun to dry. A windy day is best for drying. Always clean pillows before the ticking becomes too badly stained.

For spots on such articles that are otherwise clean, make a paste of starch and household ammonia. Coat the spot thickly with this and allow it to stand 12 to 24 hours before brushing. Also, if possible, place the stains in the sun. Repeat such applications, if necessary.

123. Neckties.—Men's neckties should be put through gasoline baths and very carefully spotted, especially the part that is tied. Spotting, in this work, means not merely removing spots or soil, but also streaks of wear. Rub these carefully in order to remove them.

In cleaning a tie, it is essential to remove the wrinkles as well as to remove the soil. To do this, it is often necessary to open the seam over the part that is tied and then press the silk of the tie from the wrong side as well as the interlining.

124. Soiled Coat Collars.—The soiled collars of coats may be cleaned with a thick lather made by using much soap and a small amount of water. Of, if preferred, the following mixture may be used:

1½ ounces white Castile soap
1 ounce denatured alcohol
1 ounce ether
4 ounces ammonia

Cut the soap fine, add 1 pint of soft water, and heat until the soap is dissolved. Add 3 quarts of cold water and then the other ingredients, and bottle tightly for future use. Shake before using.

Apply the mixture to the surface to be cleaned with a soft brush; then wipe thoroughly with a non-linting cloth, and rinse.

125. Silk Parasols.—Open the parasol and clean the surface with a piece of cheesecloth dipped in gasoline. After rinsing with clean gasoline, go over the surface with alcohol. Wipe with a dry, soft cloth and dry further by whirling in the air. Cotton or linen parasols may be washed by using the soap sponge as suggested in Art. 39.

126. Rain Coats.—It is difficult to restore the new appearance to rain coats, but soap and water will serve in some cases. Soiled spots may be removed by scrubbing the surface with these cleaning agents. The rain coat should then be rinsed thoroughly and hung on a coat hanger dripping wet.

Avoid using gasoline, as it destroys the rubber used in waterproofing.

127. Patent Leather.—If patent leather becomes finger-marked, dip a cloth in cold milk and rub until the marks have disappeared. When dry, polish with a clean, dry, soft cloth. Vaseline is good for both softening and polishing patent leather.

128. Shoes and Slippers.—The appearance of suède, satin, or metal-cloth shoes and slippers may be improved greatly by rubbing with a tampon dipped in gasoline. It is not generally satisfactory to try to wash the shoe thoroughly because the dressing on the edges of the soles is likely to run into the upper portion.

Suède shoes may be greatly improved by brushing with a wire brush, or by rubbing the surface lightly with No. 00 steel wool. There are commercial cleaners, too, that come in a variety of colors. Perhaps the most satisfactory is in the form of a stick, one end of which is the cleaning agent and the other, a brush.

White or light-colored kid shoes may be cleaned by any of the commercial preparations for such purposes.

129. Buckles.—To clean cut-steel buckles that have become rusty, rub them with a stiff-bristle brush that has been dipped into a thin paste made by mixing 1 teaspoonful of sweet oil and ½ teaspoonful of emery dust. After the buckles have been cleaned in this way, wipe them dry and then brush them with a soft-bristle brush, so as to remove the rust and the particles of emery dust and thus make them bright. In brushing, take care that none of the emery dust gets into the eyes.

130. Buttons.—To clean and brighten buttons, whether of bone, metal, or glass, polish them with French chalk, using a chamois or a soft cloth for doing the work. In cleaning carved buttons, use a soft brush to remove every particle of chalk.

131. Carpets and Rugs.—It is possible to clean carpets with a solution made by dissolving ¼ cake of white soap in 2 quarts of boiling water. When lukewarm, add 2 tablespoonfuls of household ammonia and 2 quarts of lukewarm water. Wipe the carpet with this, and follow with an application of clean water. Although strictly speaking, not a dry-cleaning reagent, this solution, because of its efficacy, is very widely sanctioned.

If one wishes simply to freshen a carpet or rug, it may be wiped, after sweeping, with vinegar and water in the proportion of 1 cupful of vinegar to 1 gallon of lukewarm water.

RESTORING FABRICS

SPECIAL PROCESSES

132. Removing Shine.—Besides removing shine by means of steam, several other methods can be followed with good results. Material that has become shiny may be restored by sponging with alcohol. If the material is seriously affected by shine, sponge the second time with ammonia and water in the proportion of 2 tablespoonfuls of ammonia to 1 cupful of warm water. Shine may be removed sometimes by simply brushing the fabric with a firm brush or by lightly drawing a piece of fine sandpaper over the surface to raise the nap.

133. Brightening Color in Fabrics.—When the color of any fabric has been accidentally or otherwise faded by acid, apply ammonia to neutralize it and then restore it to its original color with a slight application of chloroform. To procure the best results in using these restoratives, a blotter should be placed under the fabric at the spot that is to be treated, so that all superfluous moisture will be absorbed.

134. Freshening Black Goods.—Sponge with ammonia and press on the wrong side to give a fresh, new appearance to a black fabric.

PRESSING SPECIFIC GARMENTS

135. Men's Coats.—Place the coat on the board right side down and press just the facing sections, first on the button side and then on the buttonhole side, keeping the press cloth over the material. Next, turn the coat right side up, and, beginning at the button side, turn the lapel flat, cover with a damp cloth, and press thoroughly, starting at the shoulder and working downwards. Be sure to press carefully between the buttons. After pressing, pull all edges into shape and turn the front edge inward with the fingers while the material is damp. Work around the coat, lifting the sleeve up to press under the arms. Treat the buttonhole side as the button side was treated; that is, press the lapel flat and, with the fingers, work the front edge to turn toward the coat.

136. To press the *sleeves*, with the coat laid flat, arrange the sleeve so that when it is flat on the board the seam will come in the center of the under side. This plan will bring two creases in the sleeve, one at the front and one at the back, as is usually the case in sleeves in men's coats. When this side is pressed, turn the sleeve and press on the other side. Finally, finish the top of the sleeve where it joins the shoulder by placing it over a ham cushion or the small end of the board and pressing.

If a sleeve without a crease is desired, use a sleeve board. Simply draw the sleeve over the board and press, finally finishing the top.

137. The method of pressing the *lapel section* of the coat depends on whether it is to be flat or rolled.

For a flat finish, start at the button side and crease the lapel from the first button around the collar to the first buttonhole on the other side. Place a damp press cloth over the lapel and collar and press, working the collar around on the board and shaping the edge with the fingers.

For a roll finish, press the lapel sections, pressing out from the seam that joins the collar, and then steam this lightly. While damp, turn back the lapels and shape carefully.

Hang up the coat for fifteen minutes before wearing, so that it may dry thoroughly.

138. Overcoats.—Men's overcoats should be pressed in the same manner as their short coats.

139. Women's and Children's Coats.—All coats for women and misses are pressed also as directed for men's coats, but if the fronts are shaped over the bust, use a ham cushion to give a smooth effect.

The sleeves of women's coats are generally pressed without a crease.

140. Vests.—To press vests, start at the button side and proceed, as in pressing a coat, around the garment to the buttonhole side.

141. Trousers.—Place the top of trousers over the small end of the ironing board with the front opening button-side up. Using a cloth over the material, press from this opening around to the hip, then over the back portion to the other hip, and then to the front opening.

Next, press the legs of the trousers. If the knees are baggy, lay the trousers flat, front side of legs up, and press one at a time from seam to seam over the baggy portion, using a cloth that is quite damp in order to shrink the material. Then, lay the crease in the legs. To do this, place one leg on the board with seams together and lay the crease from the bottom of the trouser leg in a direct line to the suspender button or belt strap nearest the front. Place the press cloth lengthwise over the trouser leg and press from the bottom upward to the crotch. Press the cloth dry, especially on the creased edges. in order to set the crease as permanently as possible. If the garment should become slightly glossy, steam lightly.

Now turn the trousers so that the pressed leg is laid out flat away from the worker and proceed to press the other leg as previously explained. When this is done, place the legs together and smooth out with the hands or press the outer sides lightly for a finish. Hang up for 15 minutes to dry.

142. Knickers and Riding Breeches.—Knickers and riding breeches are pressed in the same way as men's trousers, except that allowance is made at the knees for the bands and the difference in shape.

143. Plain Skirts.—Draw the skirt over the ironing board, right side down, and, starting at the opening, press around, pressing from the bottom toward the top. Keep the material covered with a slightly damp press cloth, pressing it dry. If necessary, go over, on the right side, any part of the skirt that may require it.

144. Plaited Skirts.—To press a plaited skirt, turn to the wrong side, and pin the plaits in position at the bottom of the skirt, pinning them to the ironing board, and keeping the former creases as nearly as possible. If preferred, the plaits may be basted in before they are pinned to the board. Then, from the top, draw the skirt tight, and pin to the board along the top. Cover with a damp cloth and iron, pressing very firmly in order to fix the creases in the plaits. Repeat this process around the entire skirt. After removing the pins at the bottom, press over this part while the plaits are still in position in order to press them in well.

DYEING

SOLID-COLOR DYEING

ADVANTAGES OF DYEING

1. To dye, or not to dye, is the condition that recurs much oftener in the lives of most women than does that which prompted Hamlet's famous question. Many a time the dye pot is thought of just in time to save materials, garments, and household articles for perhaps several more years of service and decoration. And many are the women who are accused of becoming so fascinated by the art of dyeing and its possibilities that they are actually on the hunt for something to dye.

2. Renovating Old Clothes.—The most obvious use of home dyeing is in connection with renovating, perhaps as the last alternative that can be applied to fabric that cannot be either washed or dry cleaned without harm to its color. This includes the part it plays in make-overs of expensive silks and wools, in giving color to faded silk underwear, in freshening faded summer garments, or, in fact, in rejuvenating any material whose enduring qualities suggest further use, but whose color, if it has any, is not the desired one. A mother's dress of green, for instance, might not be suitable as a school dress for her daughter, but it can easily be dyed navy blue, recut, and made to serve as a new frock.

3. Matching Colors.—The rejuvenation of old materials, however, is not the only idea that prompts the use of dyes. If you were to visit the workshops of noted designers, you would see beautiful new fabrics and laces subjected to dyeing processes for the purpose of matching colors. So, as long as there are dyes and pieces of cloth or lace, no one need lack the proper color to make a garment what it should be,—the best it can be,—and no one need use trimming "off shade," with the thought that the proper color could not be found. Any color in any fabric can be obtained nowadays by the person who understands the theory and practical use of dyes.

4. Household Uses.—Nor is the art of dyeing confined to wearing apparel; it belongs equally well to home furnishings. Even the best of window hangings, draperies, cushions, and table covers lose their color with wear and need toning up. Or, their colors become tiresome to look at after a season or two, and a new color scheme is wanted. Then, without expense for new materials, apparently new furnishings may be obtained. Still another service of dyes in home decoration is their use in converting small pieces from the scrap bag into harmonizing colors that can be put together to make quilts, cushions, lamp shades, and table runners, adding another score for dyes in the game they play.

5. Kinds of Dyeing.—To bring about color miracles, dyeing may take one of three forms. It may be merely a matter of *tinting*, which is explained fully in Chapter I, or it may be *solid-color dyeing* or *design dyeing*. Both of the two latter methods involve the use of boiled dyes and include the possibility of obtaining deeper colors than can be obtained by tinting. And both of these methods are treated in this chapter in such detail as to make clear the principles underlying them and the processes to be followed to accomplish satisfying results.

6. Simplicity of Dyeing.—That satisfactory dyeing results may be obtained at trifling cost has been demonstrated by countless women. There is nothing experimental or difficult about it, as many seem to think. The scientific part of the dyeing processes lies in the manufacture of the dyes, and this is in the hands of the manufacturers, who give to the housewife the discoveries of chemical experts at a very low price. Certain color principles and combinations should be understood, it is true, but it is a simple matter to grasp the few points that must be known to apply the art of dyeing in a practical way. In fact, the chief requisites demanded of the home dyer are good judgment, common sense, patience, and plenty of time.

PRODUCING GOOD COLORS

7. Producing Black Shades.—The production of satisfactory black shades is, in some respects, the most difficult of all dyeing. When dyeing light colors, such as yellows, pinks, lavenders, etc., the application of too much dye merely produces a darker tone, and by watching the material in the dye bath, the dyer can very easily govern the depth of tone by removing the cloth when the color is right. In black dyeing, however, unless a person has had considerable experience in such work, this rule cannot be followed. Material always looks considerably darker in the dye bath than it does after it is dry, and for this reason cloth that is being dyed black may look very satisfactory while wet, but after drying it will present a blue-black shade. Dark blue and dark red also may look satisfactory while wet, but will always be lighter when dry.

8. Very often a more satisfactory black may be produced by giving due regard to the original color and "neutralizing" it with its complementary color. It is a well-known fact that if two complementary colors are combined, the result is gray. Gray being closely related to black, it follows that, by graying the original color and then dyeing it black, a satisfactory black will result.

To gray a color and dye it black at the same time, add one-sixteenth as much dye of the complementary color as you do of black dye. For example, if you desire to obtain black from a blue gray, add one-sixteenth as much orange, the complementary color of blue, as you use black dye. Other complementary colors are given in Chapter IV, Volume II, telling you what colors to mix with black to obtain good results. In the case of dark brown, a satisfactory black will result if the additional color is navy blue. If the material is dark green, add purple for the other color.

9. Of course, to produce a good black shade, even when the proportion of dye is correct, the directions on the dye package must be carefully followed. If the dye bath is not kept at an actual boil for the full length of time stated, the dye will not become thoroughly fixed on the fiber of the fabric and will wash out in the rinsing, leaving the material a blue-black. Whenever material presents a green or a rusty cast, it is due to the use of too much dye. This may generally be removed by washing the dyed material carefully with warm soapsuds or by boiling it for about 5 minutes in clear water.

10. Producing Shades Other Than Black.—When the material being dyed is light in color or near the shade desired, or when the old color can be used to form a base for the new, the material that is to be dyed may be prepared for the dye bath by simply removing the spots and then washing and rinsing it.

If plaids, stripes, or figured goods are immersed in the dye bath, it must not be expected that they will come out a solid shade. This by no means, however, indicates that the resulting effect will necessarily be unattractive, especially if the dye matches the darkest tint in the cloth. Special care is required in dyeing such fabrics, particularly those in which various colors are combined, and, of course, it is always best to dye a small piece before immersing the articles or material, so as to obtain the correct idea of the resultant color.

Again, it is possible to secure a wide variety of odd and striking colors, even the latest of seasonal ones, by certain combinations of dyes. A little experimenting will enable you to determine just what proportions to use, but if proper results are not forthcoming, the dye manufacturers will, on inquiry, always lend their assistance.

SELECTING COLORS

11. Color Desired and Nature of Fabric.—Before purchasing the dye, two points, namely, the color desired and the nature of the fabric to be colored, must be considered. To be able to select a suitable color requires either experience in such work or a list of colors to which reference may be made; in fact, such a list is indispensable to the inexperienced. In thin, light material and materials from which the color is readily discharged, the lighter colors can be used according to the fancy of the dyer. But there are some colors that will not discharge, and materials containing these, if washed, can be dyed with one of the darker shades; or, advantage can be taken of the effect produced by the combination of the new and the old color. Information along this line is given later in discussing the colors that can be produced by dyeing over different colors, or by *top dyeing*, as the process of applying dye over material that is already colored is called.

12. White or cream makes the best foundation in dyeing, and light pink, light blue, and light green can be dyed almost any color desired; but when the cloth is of a medium or a dark shade, the color applied must be considered carefully. Suppose, for example, it is desired to dye a red material. This color will take a darker shade of red or brown, or purple may be applied to produce a reddish-purple shade or a plum. Again, brown material may be colored to a darker shade of brown, or a catawba shade may be produced by applying crimson or garnet; red, when applied over very light greens, will be modified to a crimson or a garnet shade; and green material could, of course, be colored darker shades of green or black.

When material is slightly faded or when the color of the material is not bright enough, a dye of a similar color should be selected by consulting the dye sample card, and the material colored with this dye.

13. Suggestions for Color Selection.—As an aid in color selection, the following suggestions regarding the production of various tints and tones that may be produced by varying the amount of dye used will be found very useful. When directions forbid the use of one color over another, it is because the result would not be a pure color of practical value. These suggestions apply alike to cotton, linen, mixed goods, wool, and silk.

Black.—One average package of black will give a full-black shade on 1 pound of material that is originally of a medium color; but when applied to white or very light-colored goods, the dye should be used in a little larger proportion.

Blue, Dark.—One package of dark blue dye gives a rich, dark blue on 1 pound of material, or a Copenhagen blue on 2 pounds if the dye is applied over gray, lavender, and other light-colored materials, but when applied to material originally yellow or orange, it will be modified to a greenish blue.

Blue, Light.—One package of light-blue dye gives a brilliant sky blue on 1 pound of material, but when used in small proportion, say 1 package to 4 pounds of material, a very dainty, light blue will be produced. Light-blue dye should be applied over white or very light-colored material except for a change of color.

Blue, Navy.—One package produces on 1 pound of material a dark navy blue. It may be applied over material that is originally blue, purple, gray, light green, or light red, but not over brown.

Brown.—Do not use brown dye over dark blue. When the dye is used in the proportion of 1 package to 1 pound of a material of light or medium color, a rich brown will be produced. By using the dye in smaller proportion, however, lighter tones of brown will result, and when used very weak, tan tints may be produced. Mixed with orange dye in equal parts, beautiful golden shades can be made. Brown dye may be applied over yellow, orange, light red, or any light-colored material.

Brown, Seal.—One package will give a dark seal brown on 1 pound of material, or a medium, dull brown on 2 pounds. It may be applied over red, orange, yellow, or any light-colored goods, but it should not be used over blue.

Crimson.—One package of crimson dye gives a rich crimson on 1 pound of material. This dye may be used in smaller proportion to produce raspberry or mulberry shades. It may be applied over material that is originally yellow, orange, or red, and when applied to fabric that is brown, it will be modified by the original color to a catawba shade.

Garnet.—One package of garnet dye gives a rich, dark garnet on 1 pound of material, and when used in smaller proportions, it will produce claret and strawberry shades. Garnet dye may be applied over any of the light or medium colors.

Gray.—One package of gray dye gives a medium-gray tone on 1 pound of material. This dye may be used in smaller proportion to produce light grays, or it can be used stronger, two or three packages being applied to a pound of material if darker tones are desired. Gray dye can be applied over white or very light-colored material only.

Green.—One package of green dye gives a bright, full color on 1 pound of cloth, or it may be used in varying proportions to produce lighter greens if desired. It may be applied over light-colored materials, but when coloring cloth originally blue with this dye, the resultant color will be bluish green. Green dye is used over red or brown by experienced dyers only.

Green, Dark.—One package of dark-green dye gives a rich, dark green on 1 pound of material or a dull, medium tone of green on 2 pounds. It may be applied over any light-colored cloth, but never over red.

Orange.—One package of orange dye gives a rich, dark orange on 1 pound of goods, but lighter tones may be produced by using the dye in smaller proportions. By combining orange with yellow and using varying proportions, a great variety of tones, such as corn color, etc., may be produced.

Pink.—One package of pink dye gives a brilliant pink on 1 pound of material, but it may be used in very much smaller proportions to produce delicate pink tints. Pink dye must be applied to white or very light-colored material only.

Purple.—One package of purple dye gives a rich purple on 1 pound of material. For very delicate lavenders, dissolve 1 package of the purple dye in 1 quart of boiling water, and then for each pound of the material to be colored, add to the dye bath 10 teaspoonfuls of the strong solution. Purple dye should not be used over yellow, orange, brown, or green.

Red, Cardinal.—Do not apply cardinal-red dye over dark green, and rarely over other dark colors. One package of this dye will give a full tone on 1 pound of material. When applied over very light blue or light green, the dye will be modified by the original color to a rich crimson. Dark reds may be produced by applying this color over tan-colored cloth.

Red, Turkey.—One package of Turkey-red dye gives a bright Turkey red on 1 pound of goods. This may be applied over yellow, scarlet, orange, pink, or any light color.

Scarlet.—One package of scarlet dye gives a rich scarlet on 1 pound of material, but it may be used in a smaller proportion to give lighter tones of red. Scarlet may be applied over light colors, such as yellow, orange, and pink, but it should not be used over blue or green.

Yellow.—One package of yellow dye gives a rich yellow on 1 pound of material. This dye must be applied to white or very light-colored goods unless a change of color is desired.

14. Colors Produced by Dyeing Over Other Colors.—The following list will serve to show the colors produced in *top dyeing*, that is, by dyeing over, or on top of, other colors, and it should be referred to in selecting colors for dyeing:

Blue, Light

Over brown makes dark brown.
Over green, dark, makes bottle green.
Over green, light, makes peacock green.
Over orange makes light olive green.
Over pink makes lavender.
Over purple makes reddish blue.
Over red, dark, makes wine.
Over yellow makes light green.

BLUE, NAVY

Over green makes bottle green.
Over old gold makes green.
Over red, dark, makes plum.

BROWN

Over orange makes golden brown.
Over purple makes dark brown.
Over red makes mahogany.
Over yellow makes light brown.

BROWN, SEAL

Over green makes olive.
Over purple makes seal brown.
Over red, bright, makes reddish brown.
Over red, dark, makes seal brown.
Over yellow makes seal brown.

CRIMSON

Over blue, dark, makes plum.
Over blue, light, makes wine.
Over brown makes catawba.
Over orange makes cardinal red.
Over red, bright, makes crimson.
Over red, dark, makes dark crimson.
Over yellow makes cardinal red.

GARNET

Over blue makes maroon.
Over brown makes catawba.
Over purple makes dark wine.
Over slate makes garnet

GREEN

Over blue, dark, makes greenish blue.
Over blue, light, makes peacock blue.
Over brown makes seal brown.
Over orange makes sage green.
Over purple makes navy blue.
Over red makes brown.
Over yellow makes bright green.

GREEN, DARK

Over blue makes bottle green.
Over brown makes seal brown.
Over slate makes dull green.
Over yellow makes bright green.

ORANGE

Over blue makes brown.
Over brown makes redder and brighter brown.
Over green makes olive green.
Over red makes yellower and brighter red.
Over purple makes terra cotta.
Over yellow makes orange.

RED, CARDINAL

Over blue, dark, makes dark wine or plum.
Over blue, light, makes wine.
Over brown, light, makes crimson.
Over brown, dark, makes reddish brown.
Over orange makes cardinal red.
Over purple makes garnet.
Over red, bright, makes cardinal red.
Over slate makes dull red.
Over yellow makes cardinal red.

SCARLET

Over brown makes reddish brown.
Over pink makes scarlet.
Over purple makes terra cotta.
Over red, dark, makes cardinal red.

YELLOW

Over blue makes green.
Over brown makes golden brown.
Over green makes yellower and brighter green.
Over red makes orange.

SELECTING DYES

15. Considering Nature of Fabric.—If a person is not certain as to the nature of the fabric that is to be dyed, a small piece should be raveled and the threads burned. If the warp and the woof threads differ, then each should be tested, for in purchasing some dyes, it is necessary to state whether the material is wool, silk, cotton, linen, a mixture of cotton and wool, or a mixture of cotton and silk. Sometimes, however, the right color of dye may be obtained in a dye that may be used on more than one fabric.

Cotton burns freely and gives off an odor like that of burning leaves; wool singes with but very little flame and gives off a disagreeable odor, as of burning hair or horn; silk burns less freely than cotton, giving an odor similar to that of burning wool; and mercerized cotton, which is often used as an imitation of silk, burns the same as ordinary cotton. Artificial silk, or Rayon, should also be tested by burning. It burns up with a flash and leaves behind ashes that resemble those of burnt paper.

16. Rayon, or artificial silk, is difficult to dye, as the fabric is often weakened by the dyeing process and the original color is not always fast. Since the fiber of such silks, which are used extensively in the manufacture of trimmings, braids, etc., as well as in textile materials, is wood or vegetable fiber, it should be colored with dye intended for cotton, linen, or mixed goods.

It is always necessary to bear in mind that dyes are made of different kinds of materials; therefore, in the dyeing of either cotton or linen, the dye intended especially for cotton, linen, or mixed goods should be used, and in dyeing wool, silk, or mixtures of wool and silk, dyes put up especially for wool or silk should be employed. A good, fast, wool dye would prove absolutely unsatisfactory in dyeing mixed goods made of part wool and part cotton. In such cases, a *union dye*, made by combining wool and cotton dyes must be used. Such a dye can often be purchased already prepared.

17. Dyes on the Market.—The person asking for dyes at a store is confronted with the necessity of choosing from a number of different kinds, several of which are applicable to particular conditions and are successful only under such conditions. Consequently, as a guide in determining what kind of dye to purchase, the following classifications are given:

Dyes for Colors

- For light colors only
  - Tintex
  - Whitex
  - Tube dye
  - Ink
  - Tea } for écru
  - Coffee }
  - Crêpe paper
  - Dry-tinting powder
- For all colors
  - Diamond Dyes
  - Sunset Dyes
  - Putnam's Fadeless Dyes
  - Dyflake
  - Rit
- For all colors except black
  - Twink

Dyes for Fabrics

- Union dye for mixtures
  - Diamond Dyes
  - Sunset Dyes
  - Putnam's Fadeless Dyes
  - Tintex
  - Dyflake
  - Rit
  - Ink
  - Tea
  - Coffee
- Union dye for mixtures
  - Crêpe paper
  - Tube dye
  - Dry-tinting powder
- For silk or wool
  - Diamond Dyes
  - Whitex
- For cotton or linen
  - Diamond Dyes

Nature and Use of Dye

- Powder for boiling
  - Diamond Dyes
- Putnam's Fadeless Dyes
- Powder for rinsing or boiling
  - Tintex
  - Whitex
  - Twink
- Dry-tinting powder to be used as absorbent
- Soap flakes for washing and rinsing
  - Dyflake
- Soap cake for washing and rinsing, also boiling
  - Sunset Dyes
  - Rit
- Tube dye for rinsing
- Ink for rinsing
- Tea for rinsing
- Coffee for rinsing
- Crêpe paper for rinsing

EQUIPMENT FOR DYEING

18. Separating the preparatory work, which is done according to one of the methods in the volume, *Laundering and Dry Cleaning*, from the rest of the work, the remaining equipment essential for the actual dyeing processes does not amount to a very large assortment of tools.

Providing the following list will mean the assembling of ample equipment:

- Vessels
- Towel rods or smooth sticks
- Long rubber gloves
- Dyes
- Old teacup and spoon for mixing dye
- Quart jars, one for each color of dye, if only part of dye is going to be used at one time and the remainder saved in liquid form
- Salt or vinegar
- Measuring spoons
- Clean, lintless, colorless, old cloths
- Clothes hangers and clothes-pins

19. Most of these articles explain themselves and are mentioned in the part of this chapter that deals with their use. In the case of dyes, a preceding section is devoted to the proper selection of them, according to the articles and materials to be treated. As to the vessels and stirring rods, special kinds are necessary, descriptions of which follow.

20. Vessels for Dyeing.—In dyeing any kind of material, it is always safe to use a *clean, bright vessel* of any material except iron, although porcelain is the very best. For large articles, a *wash boiler* serves as a suitable, and perhaps the handiest, utensil, but care must be taken to see that it is clean and that its surface is not rubbed off. New lard cans or buckets also are satisfactory. In any case, the vessel should be large enough to hold the material easily, so that it can be well spread out, for spotting is almost invariably due to putting so many articles in the dye vessel that they cannot be stirred properly.

The use of two or three containers is best, for goods must be wet before they are dipped in the dye as well as rinsed afterwards in several waters.

21. Rods for Stirring.—Two *glass towel rods* from the ten-cent store are practical for stirring; also *large aluminum spoons* are useful. Many persons use *smooth, round sticks*, and these are satisfactory if they have no splinters, sharp corners, or points on which the goods may be torn. Since wood absorbs dyes, a separate pair of sticks is necessary for each color.

DYEING PROGRAM AND PRECAUTIONS

22. Order of Procedure.—Much of the success of dyeing depends on the order of procedure. The correct procedure is here given, first as a chronological list of the various steps and then in more detailed form. Before doing any work of this kind, become familiar with all the instruction in this entire section. Then, in the actual process of dyeing, follow the steps in the following list.

1. Determine nature of fabric to be dyed and the color desired·
2. Select proper dyes.
3. Assemble equipment.
4. Brush and clean garments.
5. Rip apart garments or remove trimming, padding, etc., if necessary.
6. Weigh garments.
7. Remove filling or sizing, if present.
8. Discharge original color, if necessary.
9. Mix dyes.
10. Test samples.
11. Wet materials.
12. Enter goods, following the directions according to the nature of the goods and the relation of temperature to its dyeing.
13. Stir with over-and-under motion.
14. Test sample by holding to the light for color.
15. Continue redyeing and testing until desired color is obtained.
16. Rinse until goods gives out no more color.
17. Squeeze as much water out as possible.
18. Hang in shade to dry, using hangers if garments require them.
19. Treat for crocking or undyed threads, if necessary.
20. Press, using press cloths.

23. Precautions.—Certain precautions must be faithfully observed in dyeing if streaked and spotted goods are to be prevented. If those given here are applied, good results ought to be obtained.

Be sure you understand colors and dyes.

Use enough water and a large enough receptacle.

Dissolve the dye thoroughly

Wash and rinse the goods previous to dyeing

Enter goods when the coloring fluid is at a low temperature

Stir the goods constantly so as not to allow any parts to remain on the bottom of the pan or to float on top.

See that the garments do not become knotted or twisted so that the dye cannot reach all parts.

If salt is to be added to the dye, lift the goods out until the salt has become dissolved.

Leave as little loose dye as possible in the goods.

Squeeze out as much moisture as possible so that the goods will not drip and dry in streaks.

Dry garments on hangers; never hang any dyed fabric across the line.

Never hang dyed fabrics in the sun.

Do not press with hot irons without press cloths.

Make allowance for the shrinkage that always occurs when a garment is dyed, especially when boiling dyes are used.

PREPARING THE GOODS

24. Cleaning Garments.—The first step in home dyeing is to prepare properly the material that is to be dyed. Every article and all material to be dyed should be thoroughly and carefully cleaned. First, remove any spots of grease, paint, etc., following the directions given in Chapter II for doing such work, and then clean the material thoroughly by washing it in soap-suds and rinsing it carefully. Keep it moist until it is placed in the dye bath.

25. Ripping Garments Apart.—As a rule, it is best to rip garments apart before dyeing them, because in this condition they can be more readily spread out and kept from bunching in the dye bath, thus overcoming any tendency toward the formation of spots or streaks. Then, too, the thickness at the seams is not readily dyed. Also, if the material is worth it and time is available, it is desirable to make all new seams, as the new firm stitching will give a freshness to the redone garment.

When it is not practicable to rip a garment, it may very often be colored satisfactorily if special care is taken to remove all trimmings, braids, etc. that are sewed to the garment. If these are not removed, the dye liquor will not penetrate thoroughly underneath them, and if they are subsequently removed, light-colored places will be found. In dyeing coats, both the padding and the lining should be removed.

26. Removing Filling or Sizing.—The filling or sizing in new material must be removed before dyeing, if good results are desired. The filling in silk may be removed by soaking the fabric in warm water, and the sizing in cotton, by boiling for 20 or 30 minutes.

Frequently either new or old silk, particularly taffeta, is so heavily weighted with tin (added by the manufacturer to increase the weight, since silk is sold by weight) that it disintegrates during boiling, being cut by the metallic loading. Or, it may be that the silk was originally scorched on the drying cylinders during its manufacture. While it is impossible to obtain satisfactory results in such case, still soaking the material to remove the loading or filler may help to prevent the disintegration of the silk during the dyeing process.

27. Discharging, or Stripping.—As to color, one or two things especially must not be overlooked. For example, dark colors cannot be colored lighter; nor will black take brown or navy blue. Nevertheless, while all this is true, the range of colors can be increased by first getting rid of as much of the original color as possible. In fact, this procedure is advisable unless simply a darker tone of the original color, a similar color, or a combination of it with the new is desired. The process of getting rid of the original color is known as *discharging*, or *stripping*.

28. Nearly any color can be discharged by continuous boiling in clear water. Thus, place the goods in a wash boiler or some other sufficiently large vessel of granite or aluminum, cover it with water, and then boil it until the water becomes well-colored, stirring frequently. The material should remain at boiling temperature on the stove from 15 to 30 minutes. Then change the water and boil the material again, repeating the process as long as the fabric gives off color.

In discharging color from silk or cotton goods, a little pure soap or ammonia may be added to the boiling water to quicken the action; if the material is wool, this process should be avoided because boiling will thicken the fabric and spoil its appearance.

29. As will readily be seen, if material is placed in the dye bath without discharging, the old color of the material and the new dye used will mix in the bath and the resulting color will be a combination of the new and old colors, and not what might ordinarily be expected. Because of this, plan the dyeing of wools carefully, taking into consideration the combining of colors.

PREPARING THE DYES

30. Following Directions Accompanying Dyes.—Either on the outside or in the inside of each package of commercial dyes are full directions concerning the use of the contents of the package, and these directions are, of course, to be followed explicitly. In the case of such agents as, because of their dyeing properties, may be made to serve as dyes, for example, tea, coffee, ink, and crêpe paper, directions governing their use are given in Arts. **178** to **180,** inclusive, *Home Laundering*, under the subject of tinting, which contains also a discussion of tinting powders, Art. **176,** soap dyes, Art. **177,** and dry tinting, Art. **181.**

31. Although a so-called boiled dye, such as a Diamond Dye, is accompanied by full directions, a complete explanation of the processes, from beginning to end, follows so that the cautions and precautions, the order of processes, and the various fine points that become known only by experience, may be fully understood. Since the instruction in Arts. **32** to **50,** inclusive, covers the most difficult of all solid-color dyeing, an understanding of it provides information that can be applied to any form of dyeing.

32. Determining the Amount of Boiled Dye.—All articles that are to be colored should be weighed in order to determine the amount of dye to be used. The depth of tone produced depends on the amount of dye used in proportion to the weight of the cloth that is being colored. As a rule, each package of dye will give a full tone to 1 pound of light-colored material; therefore, allow 1 package of the dye to each pound of the material, provided the full strength of the color is desired; or, if the material or article weighs only a fraction of a pound or a fraction over an even number of pounds, a corresponding fraction of the dye contained in 1 package should be used to produce a full shade. When very dark colors are desired, it is necessary to use the dye in larger amounts than the proportions mentioned, and when light tints are to be obtained, less dye must be used.

Do not have the bath too strong. It is better to have a long immersion in a weak dye bath than a short immersion in a strong one. Too much dye, put on too thick, is the cause of crocking and it should be avoided.

33. Mixing the Dye Bath.—To insure the thorough dissolving of the package contents and resulting absence of all spots and streaks, it is best first to work the dye into paste form with the aid of a little cold water, and then gradually add hot water in the proportion of 1 quart to each package of dye and bring it to the boiling point, continuing the boiling and stirring until the dye is thoroughly dissolved.

Next, place in the dye vessel enough warm water—soft water gives the best results—to accommodate the material easily, so that it may be kept well spread out without bringing any portion above the surface of the dye liquor. If not enough water is used, the material is likely to bunch and this will cause spots and streaks. Add to the water salt or vinegar, as directed on the envelope of the dye that is being used, and stir. Next, add a portion of the dye solution by straining it through a cloth, so as to *be sure that there are no specks of undissolved dye in the solution.*

It is wise not to use all the dye at one time, for a little experimenting may be necessary to secure just the right shade.

DYEING THE MATERIAL

34. Entering the Material.—When the dye bath is lukewarm, it is time to immerse the fabric, which must be moist. There is good reason for allowing the liquor to reach the boiling point *gradually.* If the fabric comes in contact with a hot solution, the dye will be fixed more rapidly than if it comes in contact with dye at a low temperature, with the result that streaks and spots are likely to form.

35. Stirring the Material.—Another requirement of even dyeing is to *keep the material in constant motion* and not allow it to bunch or rise above the surface of the dye bath. From the time the material or the article enters the dye bath, it should be continually moved with the sticks, always with a tendency to spread it out so that it will occupy as much room in the dye vessel as possible. The motion should be over and under, not round and round. Do not allow the goods to become knotted or bunched in one part of the vessel or to float upon the top of the dye bath. Rather, often lift and turn the material over completely, in order that one portion will not remain in contact with the bottom of the vessel for any length of time, because at this place the heat is greatest and the dye will therefore be forced in and will produce a heavier tone.

36. Time Required for Dyeing.—No fixed rule can be laid down as to the time required for dyeing a fabric, but it is certain that many persons obtain poor results simply because they are in too much of a hurry. Also, a great deal depends on the character of the fabric and the strength of the color desired. It is well to remember that the longer the fabric remains in the dye bath, the more dye it will take on, and the darker it will become until the dye is exhausted.

Sometimes a very brief period in the dye bath suffices where an exceedingly light tint is desired and the material is of a loose, soft weave; but, of course, hard-twisted material requires more time. If the fabric takes the dye slowly, as is usually the case with black, brown, and other dark colors, the boiling process may be extended to an hour or more.

37. When possible, *keep a small sample of the fabric immersed* in the dye solution, so that from time to time it may be taken out and inspected. This plan is much simpler than lifting out the entire garment. When inspecting the color, bear in mind, as has been mentioned before, that goods appear darker when wet than when dry, but that a very good idea of what the color will be when dry may be had by holding a single thickness of the material in bright sunlight and looking through it.

38. Successive Dye Baths.—Often continuous boiling is not sufficient to make the color dark enough, so more dye must be added. In adding more dye, remove the material or article from the dye bath and see that the additional dye is thoroughly mixed and boiled up with the other dye before the fabric is put back, so as to prevent the spotting of the goods with the fresh dye. Keep adding more dye until the color is dark enough.

When the color seems to be sufficiently dark, take the fabric out, but do not turn out the dye bath until the fabric is thoroughly dry and you have ascertained that the color is satisfactory. If the color is too light, add more dye to the old dye bath in the manner just explained, wet the fabric, and wring it lightly before putting it into the dye bath the second time, and then boil it in the dye until it is dark enough.

39. Successive dye baths, as just described, will give the desired result, though the process is often somewhat tedious. Adding dye of the complementary color in a darker tone is an excellent method for darkening colors. Another method, not so desirable but quite effective and often employed to give a satisfactory navy blue, is to add a small amount of black dye to the dye bath.

To soften a color, add a small amount of its complementary color —red to green, orange to blue, and yellow to lavender, or vice versa. Different proportions produce different effects, which can be determined only through experimentation.

When your dye bath has been prepared, you will find it both interesting and instructive to try out other scraps of colored material in it and note for yourself the variety of effects that are produced.

40. Regulating Temperature According to Fabrics.—Different points regarding the temperature are to be observed with different materials. In dyeing *artificial silk* or *mixed fabrics* in which vegetable fiber predominates, keep the temperature of the dye bath lukewarm for 15 minutes after the material is put in; then bring it to a boil and maintain this heat for about ½ hour. Then remove the dye kettle from the fire and allow the material to cool in the dye for about ½ hour before rinsing it, of course stirring the material constantly during the entire process.

41. In dyeing *cotton* materials, put them in the lukewarm dye bath, bring it slowly to a boil, and keep it at this temperature for 30 to 45 minutes, or until the fabric is dark enough. After boiling, remove the dye vessel from the fire and stir the goods ½ hour while the dye is cooling. Remove the goods and rinse in warm water until the water is almost colorless. Then, without wringing the material, hang it up to dry, turning the article from top to bottom occasionally while it is drying. When it is dry, or nearly dry, press it.

42. In dyeing fabrics of *wool* or *silk* or mixtures of wool and silk, keep the dye bath at boiling point during the dyeing—not merely hot or steaming, but at boiling point. This temperature is required to fix the dye in the cloth. As soon as the material is the desired depth of color, take it from the dye bath and rinse immediately in warm water as in the case of cotton goods.

43. Rinsing.—Careful rinsing is quite as important a process after dyeing as before. When the rinse water becomes practically colorless, it is then time to dry the goods.

To avoid the formation of hard wrinkles, do not wring the material hard. The best plan is simply to squeeze out as much of the water as possible with the hands without wringing at all. If old, clean, colorless cloths are available, wrap the fabric in these and squeeze out the remaining free moisture before hanging to dry.

During the rinsing processes is the time when rubber gloves come in handy, for with long, rubber gloves on the hands, no one need hesitate to use the hands to squeeze out the water.

44. Silk frequently loses its life and luster when dyed, but the luster may be somewhat restored by washing with Castile soap and water, rinsing in clear water, and then dipping in a solution of cider vinegar in the proportion of 1 tablespoonful to 1 gallon of water.

45. Drying.—When coats, dresses, waists, and similar articles have been colored without first having been ripped, place them on coat hangers and then hang them on the clothes-line to dry. In the case of a skirt, use a skirt hanger or pin the belt together and then pin it on the line. Avoid hanging garments across the line, for there is danger of the line leaving a mark.

Always dry the dyed material in the shade,—never in the sun,—for the hot sun shining on a dyed fabric is likely to cause streaks and blotches that can be obliterated only in a second dye bath.

46. Pressing.—As far as possible, dyed goods should be pressed on only the wrong side. Press *silks* while they are slightly damp, using a thin press cloth between the iron and the silk, for the iron placed directly on the silk will result in a fabric that is entirely too stiff and that shows shine on one side. Do not use an iron that is too hot, as the heat takes out the dressing and leaves the silk soft and old-looking.

Ribbon should be pressed in the same way as silk.

47. In pressing *woolen goods* on the right side, dip a thick cotton press cloth into water and then wring it out as dry as possible with the hands. Have the irons hot, but not hot enough to scorch through the cloth. Place the press cloth very smooth over the part that is to be pressed and keep the iron moving in a rotary movement or from side to side, so that no marks of the iron will be left on the material from allowing it to stand too long in one place. Never push or drag the iron along on the material. Lift it from one part to the next, and always press until the press cloth is thoroughly dry.

In materials with a long, hairy nap, such as camel's hair, wrinkled spots should be brushed the way of the nap both before and after being pressed. In pressing serge or material with a rather hard finish, unusual care should be taken to use well-padded, soft press boards so as to avoid the shiny look that will otherwise result. This shine may be removed by placing a dry cloth over the fabric on the right side and a second cloth, wet and wrung out as dry as possible, over it. Use a hot iron, pressing not too heavily, and keep the iron moving. When steaming wool, lift the cloths and beat the material with the hand or the back of a tailor's brush, giving two or three rapid strokes, and then brush it dry either with a dry cloth or with the brush.

48. *Cotton material* that has been dyed should be dampened well after it has dried and then ironed on the wrong side with a moderately hot iron.

49. Crocking of Dye from Material.—When dye shows a tendency to crock, or rub, from the material, the cause is usually too much dye or not keeping the dye bath at the proper temperature for the full length of time. Long immersion is necessary to fix the dye thoroughly. When too much dye is used, it cannot be fixed properly and consequently tends to rub off.

Crocking may be remedied by boiling the material, provided it is not wool, for about 5 minutes in clear water, or by washing it carefully with warm water and soap.

50. Undyed Threads.—If the threads running one way of the material take the color and those running the other way remain light or uncolored, there is evidence that the goods is mixed. A wool dye used on goods that is wool and cotton mixed will color only the wool threads. There is not much danger of such an occurrence if the material is thoroughly and correctly tested before dyeing, but if it does occur, the remedy is to redye the goods with dye for cotton, linen, or mixed goods of the same color as the wool dye that was used.

51. Coloring Lace.—Lace, too, can be successfully dyed. White lace may, of course, be dyed any color, but dark-colored laces seldom take a good black unless a great deal of the original color can be discharged before dyeing. Laces may be restored to their original tone and made to look like new by applying dyes similar to the original shades. They may also be successfully dyed to match a gown if care and pains are taken. The dye must be of the exact color, which can be obtained only by following the directions and testing with samples of lace until the desired tone is obtained.

52. To color lace an *écru tinge*, boil it in coffee that is strained and diluted to the right tint, letting the lace remain in the coffee for ½ hour. Tea used in the same way will give a *pinkish écru tint*, and strong black pepper steeped in water will give a dark *tan color*.

TABLE II

DYEING WITH OIL PAINTS

Color Desired	Oil Paint Required
Lavender	Mauve
Coffee	Brown ochre
Golden brown	Umber
Tan	Van Dyke brown
Pongee	Van Dyke brown and ochre
Taupe and dark gray	Black
Taupe and light gray	Black and geranium lake
Green	Chrome yellow and Prussian blue
Light blue	Prussian blue
Turquoise blue	Prussian blue and yellow
Navy blue	Prussian blue (only)
Shell pink	Geranium lake
Salmon pink	Geranium lake and yellow
Cerise	Geranium lake (only)
Dark green	Prussian blue, yellow, and ochre

To color lace by means of oil paints and gasoline, mix your colors and thin with gasoline, testing a sample until the desired tone is obtained. The more gasoline is used, the lighter in tone the color will be. Other methods of coloring lace are given in Arts. **176** to **181**, inclusive, *Home Laundering*.

53. Dyeing Feathers.—For the dyeing of feathers, use regular oil paints, which have as their foundation white lead. Mix $\frac{1}{2}$ cupful of gasoline with $\frac{1}{8}$ teaspoonful of paint, or use enough to obtain the tint desired. After the feather is tinted, put it through the corn-starch bath in the regular way; then beat in the hands until thoroughly dry, and steam over the kettle and curl.

54. The chart given in Table II will be found helpful to obtain various colors in dyeing feathers.

55. Miscellaneous Articles.—There is scarcely any limit to the possibilities of home dyeing. Beside articles of wearing apparel, it includes curtains, lamp shades, bedspreads, baskets in large variety, bone, ivory, and wooden beads, portières, luncheon cloths, scraps for rag or hooked rugs, and even faded blankets and rugs.

In the case of rugs, the strong dye solution is applied with a scrubbing brush after the rug has been made as free from dirt as possible. Care must be taken that the dye does not soak the sizing on the back of the rug. Rubber gloves and a kneeling pad add to the comfort of the worker in doing the work.

SPECIAL DYEING PROCESSES

APPLYING DESIGNS

56. Besides the solid-color dyeing just described, there is the dyeing which consists of applying designs to solid-color backgrounds. Dyeing of this type is more difficult and requires more time and equipment than solid-color dyeing. However, anyone who has artistic tendencies will find it very pleasant work, which may be done either for pastime or for profit.

57. Dyeing of this nature comprises such processes as *batik dyeing*, *tied dyeing*, *stenciling*, *block printing*, and the *painting of fabrics by hand*. Complete instructions for batik and tied dyeing follow, but block printing and hand painting, which require either considerable equipment or some talent at free-hand painting, go beyond the claims of the dyeing that would be done in the majority of homes. Also, stenciling is not considered here except as to the way in which stencil patterns can be used in batik work. As a separate form of art, stenciling is not difficult, nor is instruction concerning it inconvenient or impossible to obtain, for stenciling outfits with complete directions are obtainable where art supplies are kept in stock.

BATIK DYEING

58. The ancient craft of **batik dyeing** had its origin in Java and took its name from the Javanese word meaning *wax dyeing*. From time to time, it is revived according to the vogue for Orientalism of which it is a feature.

This type of dyeing comes under the class of *resist dyeing*, the fabric being covered with wax where it is not to take the dye, next dipped in the dye, and then the wax melted off. The simplest kind of batik consists, of course, of dipping the fabric only once, but very elaborate color combinations were, and still are, produced by dipping the fabrics as many times as the number of colors desired.

59. Dyes.—For batik work, the most satisfactory dyes are those in powder form. It will save time later in the process if at the outset you prepare jars containing all the dyes that you will be likely to use. When the directions specify the amount of water, disregard them; use two packages of dye to a little less than 1 quart of water and put each color solution in a separate self-sealing glass jar. As these proportions will produce very strong solutions, they may prove sufficient for several dyeing experiments.

60. Fabrics.—Generally crêpe de Chine and crêpe meteor are preferred, as they are soft enough to allow the wax to penetrate easily and yet have sufficient body to permit the design to be drawn on them. But whatever the material, it must have a smooth surface. Velvet is very beautiful when batiked, but it is a difficult material to dye because of the deep pile and also because of the patent back of so many grades.

61. Wax.—If you are unable to secure the wax specially prepared for this work, make a mixture of 2 parts beeswax to 1 part paraffin. Pure beeswax will stand the hottest temperature, and paraffin added to the solution will make it more brittle, so for the much desired crackled surface pure paraffin or 1 part beeswax to 5 parts paraffin may be used.

62. Applying the Design.—Stretch the goods so that it has a flat surface upon which the design may be drawn. If the material is sheer and you intend to duplicate the motifs, you may double the material. Except for bold, all-over designs, draw an appropriate design with lead pencil. If you cannot do free-hand drawing, select a conventional fruit, flower, or bird design that is in the proper proportions for the article you are making and apply it by means of carbon paper. Or, employ stencils, which may be purchased for the purpose.

63. While stretching the fabric so as to draw on the design, you can eliminate extra work by preparing it for the application of the wax. A sheet glass or mirrored surface is perhaps the most satisfactory foundation for this process. A marble-top table is just as smooth, but it is so cold that the wax is likely to harden on it too rapidly. Another device is a cardboard frame with the center cut out, but if you use this you must hold it in an upright position while you are applying the wax. If you allow it to lie flat, the wax will adhere to an ordinary table surface and you will break the design while working it free.

64. Brushes and Tjantings.—The process of applying the wax requires fine hair brushes, the sizes being determined by the lines that are to be waxed. In the trade, *tjantings* of various designs are used together with brushes. These tjantings are instruments that contain the hot wax and have small spouts through which the wax is poured. The latest implement of this nature resembles closely an Eversharp pencil.

If you are going to use a brush and the tip is not sufficiently pointed, dip it into a little moderately hot wax and let some drip off. When the rest has cooled on the brush, it will give sufficient body to the hair to permit you to trim the brush to a point by means of sharp shears.

65. Applying the Wax.—With the goods and implements ready and the jar of heated wax placed in a pan of hot water that will keep it at the proper temperature, test a brushful of wax on an extra piece of material to see how much wax you need on the brush in order to draw the lines on the particular material that you are decorating. When you have gauged the amount of wax you can leave on the brush in order to make steady lines, you may draw in the design.

If your material is doubled in order to duplicate the design, examine the back of it and touch up any places where the wax has not penetrated. Also, heavy materials often have to be touched up at the back.

66. Applying the Dyes.—Remove the silk from the frame, and, if it is doubled, gently pull apart the two thicknesses. Prepare two pans, one of clear, cold water and the other of either cold or lukewarm water for the first dye bath, the temperature of which must not be such as will melt the wax. Be sure that there is sufficient liquid in each to cover the goods.

67. First, dip the material in the cold water, making sure that the water penetrates every spot that is free from wax. Hold up the material until almost all of the water has dripped from it; never wring on account of cracking the wax.

Next, dip the material in the first dye bath, which is, of course, the lightest color you intend to use. It is prepared by putting in your second pan of cold water as much of the intensified dyeing solution as you need to give sufficient color properties. Strain the dye through fine-mesh cloth to remove any sediment, which would give uneven results. Allow the fabric to remain in the dye until it has acquired sufficient color. Then rinse several times. Dry by absorbing part of the moisture between cloths and then hang in the air.

68. When it is dry, rewax the already waxed portion and the part of what you have just dyed that you do not want to take another color. Then, dip in cold water and proceed as for the first bath.

If you desire a crackled surface, crumple the fabric in your hands before you put it in the last dye bath. In this way, you can crackle the entire surface or only part of it, according to the design or effect desired.

69. Melting Off the Wax.—A gasoline bath is the best method of taking off the wax, although ironing between blotting paper will remove nearly all. Hot water is effective, but is likely to affect the dyes and cause them to run together. In the case of velvet, the wax should be removed by gasoline and the nap then raised by steaming.

Always remember that, whatever methods you employ, you should remove every particle of wax; otherwise the finished product will have a stiff feeling and be lacking in natural luster.

70. Finishing Processes. After you have completed the dyeing and melted off the last coat of wax, wring the fabric firmly, and roll in a cloth to absorb part of the moisture. In order to avoid streaking, iron the material while still damp. Ironing between sheets of unglazed paper is the best policy.

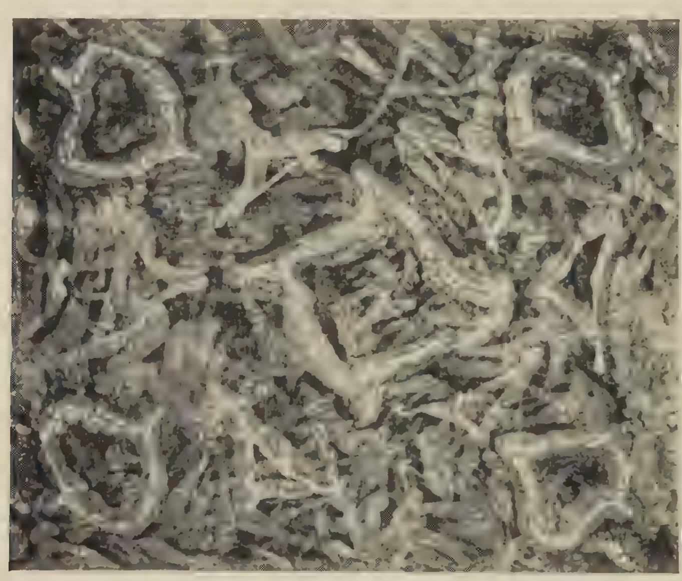


Fig. 1

71. Dyeing in All-Over Design.—Fig. 1 illustrates a section of a crêpe de Chine scarf that may be used in various ways as a hat trim. It has an all-over design, the original of which was dyed in tan, orange, and red, with sufficient dark blue crackled into these colors to give character to the design.

The first step in making this scarf is to procure, or to dye, a square of crêpe de Chine in light tan. In this case, the original was white, so the first bath was in tan dye. After the scarf has dried, paint on, in wax, any free-hand design that has balance and is in proper proportions for your scarf. You may do this roughly and quickly with a fairly large brush, such as a No. 5.

72. As the wax will harden as you are applying it, you may continue immediately with the dipping, first in clear water, then in the orange dye. Since this dye must be cold in order not to melt the wax, it must be strong and must have salt in it to set the color. A good proportion is 1 tablespoonful of salt to 1 quart of dye solution.

When the scarf has taken a deep enough orange, rinse it in cold water. If you put salt in the first rinse water, you will save much of the color from rinsing out, thereby necessitating only three or four rinsings.

73. Dry out the scarf, keeping it away from intense heat or sun so as not to melt the wax. Then cover up part of the newly dyed orange with wax. Also, touch up the design already preserved on the tan, for some of the wax may have cracked in the preceding bath.

Next, dye the silk in red dye exactly according to the directions given for the orange bath. When you remove it from the dye, it will be red except for the tan and orange portions that are protected by wax.

74. Crackling.—For the crackling, cover nearly all of the red, leaving small patches here and there to take the blue dye. These patches should be well placed throughout the piece so that no portion will seem to have more blue than another portion. For this waxing, remember to use the kind of wax suggested for crackling.

Dip the scarf in the blue solution, rinse, and redip after you have crumpled the goods in the hand to give the crackled effect. For this step, rubber gloves are a great saving to the hands, for it simplifies the crackling process to be able to put your hands in the dye and manipulate the goods as you desire. Lift out the goods at intervals so as to see how much blue has penetrated and whether the wax has crackled as much in one portion as in another.

75. Removing the Wax.—When you are satisfied with the general effect, dry the scarf; then iron between colorless blotters. This process will dispose of nearly all of the wax, but, in order to restore the goods to its former luster and softness, dip it in gasoline, which will dissolve all remaining wax.

76. Using a Stencil.—The process involved in doing batik dyeing with the aid of a stenciled design is one that requires great care. If you attempt to place the stencil on the fabric and wax through the perforations, you will find that unless you hold the stencil tight, the wax is likely to fasten itself to the stencil and crack when you remove the stencil. Consequently, the most satisfactory method of transferring the design from the stencil to the fabric is to trace the outline with pencil.

Of course, you will need a sharp pencil point and will have to be cautious about not bearing down on the pencil hard enough to indent or injure the fibers of the material. The best policy is to trace the outline on the wrong side of the goods; then there will be no danger of showing the penciled pattern, which is likely to happen in the case of light-colored dyes. But in the case of velvet, because it is such a deep-pile fabric, it is best to outline the pattern on both sides; then if the wax does not penetrate to the right side, extra wax can be painted on the design on the right side to fill spaces and even up the lines.

77. The design illustrated in Fig. 2 is a conventionalized bunch of grapes, which is effective when worked out in the three colors of the original, light purple, bottle green, and deep blue-purple. The material in this instance is heavy faille silk of a purple tone.

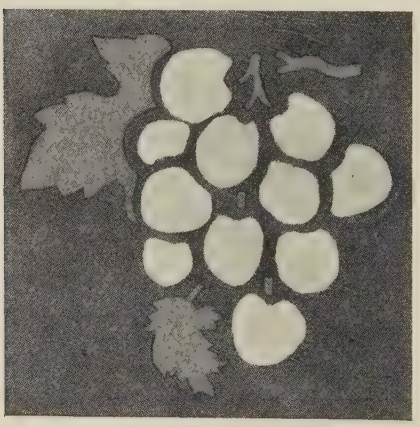


FIG. 2

In the process of making this design, the first step is to transfer the pattern by tracing it through the stencil with a sharp-pointed pencil. Then, to preserve the original color, purple, in the grapes, cover the grapes with melted wax, using for this purpose one of the smallest brushes obtainable.

Too much care cannot be exercised in waxing so as to keep the pattern accurate. First, follow the outline by painting inside the edge of the grapes. You will notice, as you are applying wax to any silk, that the wax will spread rapidly, but applying the wax first inside the edge and then allowing it to harden will help to confine the wax you still have to apply or give it space over which it may spread without running over the edge and making an irregular contour.

Another point to be watched in the applying of wax is the amount of wax allowed on the brush. Do not fill the brush, or the wax will blot; yet, allow the brush to take up sufficient so that it will keep its heat and not harden before you can bring the brush in contact with the pattern. After the edge of a grape has been waxed, you may fill in the center. This does not require so much pains, for the hardened wax around the edge will help to keep the hot wax from spreading when you are applying it.

78. When you have covered all the grapes with wax, the design is ready for its first dye bath. For this, mix a rather strong solution of bright green dye and use salt to set the color as directed for the all-over design. The strong solution of dye and salt is, of course, necessary because the dye, in order not to melt the wax, must be used cold or lukewarm.

Dip the silk into cold water, then into the dye, and keep it there until it has absorbed sufficient coloring matter; then rinse it several times in cold water, clear except for the presence of salt in the first bath. Do not wring the material, for then the wax will crack off and cause the material to become streaked. Hang the silk up to dry, but not in the sun or in the immediate proximity of heat, for the heat might affect the wax.

79. After the silk has dried, apply wax to the leaves and stems of the pattern, taking the same precautions that were necessary in the waxing of the grapes. This coating of wax will make it possible for the leaves and stems to retain the green of the previous dye bath, a green that is not unlike the color of a natural grape leaf.

For the second dye bath, mix as deep a tone of purple as you can. This will unite with the original purple coloring apparently absorbed in the green and turn the green to a deep blue-purple that will harmonize with the light pink-purple grapes and bottle-green leaves.

After you have rinsed and dried the silk, you are ready for the last process, which is to remove the wax. Much of the wax may be melted out by pressing the material between white blotters, using a moderately hot iron. A gasoline bath, however, will do the work more quickly and will prove more effective.

80. The original of the conventionalized beetle design illustrated in Fig. 3 was in light tan, burnt orange, and orange red on a wine-colored background, the material being all-silk faille.

As the tan is the lightest color in the design, it is the original color of the silk, it being preserved in the two circular spots and four tiny spots by wax. The first bath is in orange dye, and in it the same steps are necessary as are given in connection with the grape design.

Wax over the portions you wish to keep orange; then dip the silk in a red bath, which will turn the remaining portions to a rich red-orange. Finish covering the beetle design with wax, and then dip the silk in a deep purple dye. This will turn to a deep wine color the unwaxed part of the silk that forms the background for the batik pattern.

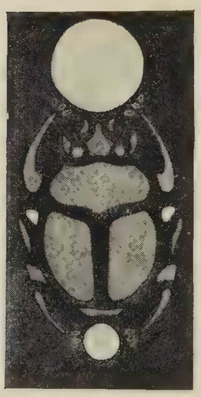


Fig. 3

TIE DYEING

81. The process of **tie dyeing,** or **tied and dyed work**, which is another ancient craft, is a very artistic and interesting one, but does not produce the exquisite results that are secured in batik. The working principle in tie dyeing is to tie or wind all parts of a fabric that you do not want to be affected by the dye bath.

82. Preparations.—Before you begin actual work on a piece of material, have clearly in your mind the design that you desire to make and the colors you intend to use. Have your dyes prepared and always remember to dye the light colors first.

For winding the parts that you do not desire colored, have on hand waxed thread, common cord, or tape. Also, if you desire to make the little designs illustrated in Fig. 4, provide yourself with marbles, buttons, shot, dried peas, or similar round objects.

A needle and thread come in handy, too, for in the making of a large circular design, a truer circle can be obtained by basting it and then drawing the thread up tight before winding. You will readily see that this makes a more regular pattern than would be produced by folding or gathering the material in the hand. A thread run along in zigzag fashion and then pulled tight is another way of producing an effective design.

83. Dyeing Scarfs.—The 15″×18″ scarf illustrated in Fig. 4, was made up in yellow, rose, and magenta, according to the following directions:

Start by making a $\frac{1}{4}$-inch plain hem along the four edges; then you will have no difficulty in matching the thread with the final color of the scarf.

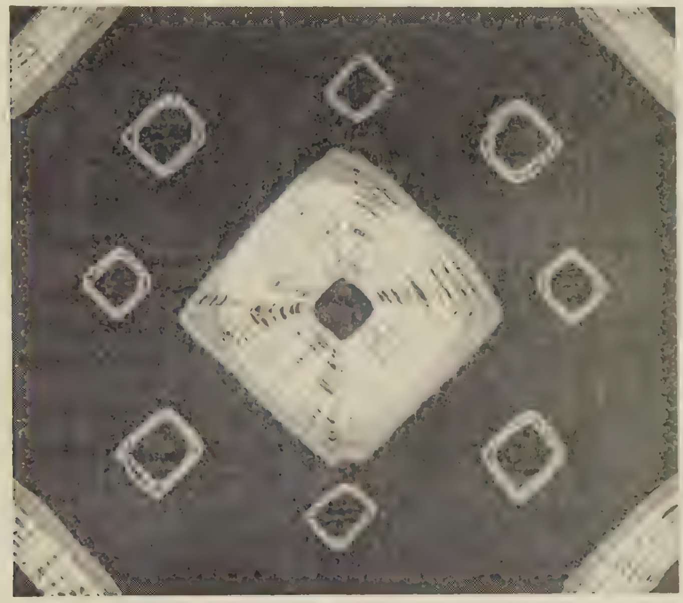


Fig. 4

The dyes you will need are yellow, pink, red, and blue. Prepare them just as in Art. **59** for batik dyeing—strong solutions to be diluted according to the color desired. But when you dilute them, you may use warm or hot water.

84. Since yellow is the lightest color, you may start with yellow crêpe de Chine or else dye white crêpe de Chine to the proper color. Then prepare the rose bath by pouring some of the pink dye into a pan of warm water and adding a little yellow. Strain these dye solutions through fine-meshed cloth, as directed in Art. **67** for batik dyeing. Drop a sample of yellow silk into the bath to test the color. If it is not right, keep adding pink or yellow to it until the color just suits you. Be sure to test with a yellow sample instead of with a white one, for this makes considerable difference. Also, keep the sample that pleases you, because you will need it to test the next dye bath.

When the rose dye is as you want it, put in salt as a mordant. A teaspoonful to a quart is plenty, for less salt is necessary with hot or warm water than with the cold water used in batik work.

85. At intervals between waiting for water to heat, for samples to take color, or for salt to dissolve, wind your scarf as shown in Fig. 5. If you have nothing on hand for the winding, draw heavy basting threads through wax and double it so as to use four thicknesses.

Fold the scarf in half, then in half again, determining the central point. Then, 3 inches from the center, run a basting thread, making as true a circle as possible. Draw up the basting thread and wind the material to within about $\frac{3}{4}$ inch from the center. While you are winding, leave intervals where the dye can penetrate. For the corners, wind the material in the same way for about 3 inches to 1 inch from the extreme point.

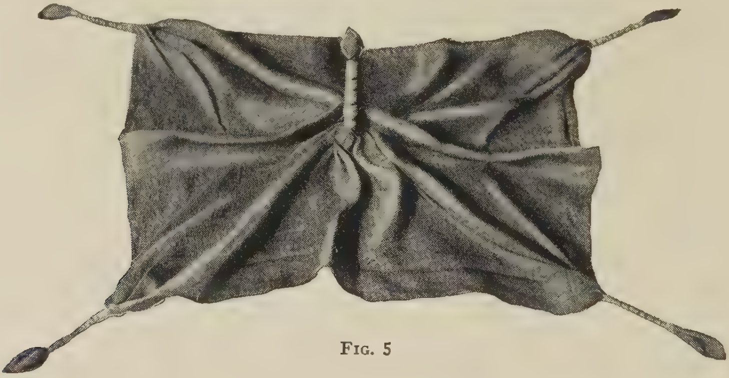


FIG. 5

While you are winding, keep one end of the waxed thread free, as this will simplify matters when you are ready to tie the ends, also when you are ready to cut the ends and unwind.

86. Now dip the scarf, as it is in the stage shown in Fig. 5, first in clear water and then in the rose dye. Stir it constantly so that it will dye evenly. The strength of the dye will help to determine how soon it should be removed, for if it is very strong, the silk will not have to remain in it long in order to absorb much color.

When you are satisfied with the color, remove the silk, rinse it in several waters until no more color comes out of it, press some of the water out between papers or cloths, and then hang it up to dry. When it is nearly dry, unwind the threads and let the protected part dry. It will then look like the square illustrated in Fig. 6

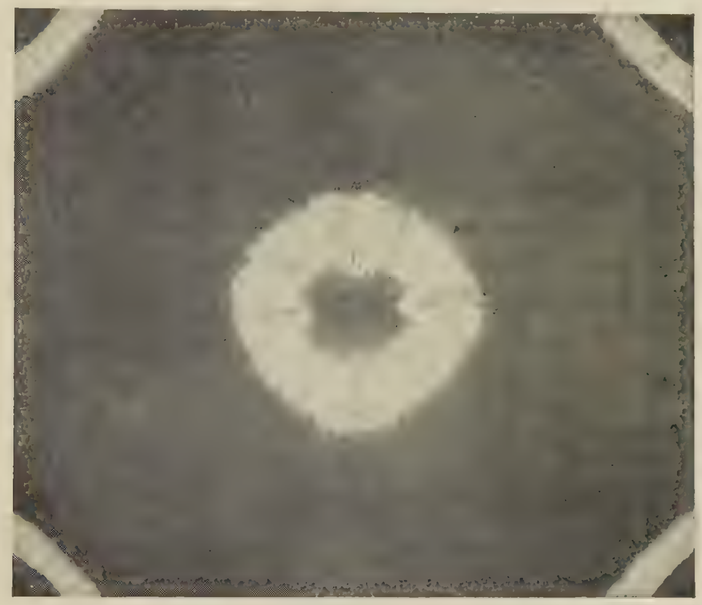


Fig. 6

87. The next step requires retying and rewinding. Button molds make the round nubs shown in Fig. 7, those at the corners being medium-sized ones and the other four, small ones.

Lay the scarf flat and place the molds at points of equal distance from the center, edges, and corners. The center of the molds will be about 3 inches from the central yellow band, the small molds being much nearer the edge than the others.

After you have tied in the eight button molds, rewind first the corners and then the center. You will notice that two of the corners in the illustration are wound as examples. About $\frac{3}{4}$ inch of the extreme corner is left free, and the rest wound for 3 inches. Thus a $\frac{1}{4}$-inch margin of rose will be preserved on one edge of the yellow motif, and a 1-inch margin on the other. As for the center, wind so that the same width of margin remains in rose on both edges of the yellow. But remember to wind the thread more loosely than you did for the first bath, as the design will prove much more effective if you allow streaks of the purple to penetrate both the yellow and the rose.

88. At times during the winding, you may be preparing the purple dye. Either purchase a pure purple dye, or make one by mixing red and blue. Test the mixture on both yellow and rose so as to ascertain how blue a purple you will need in order to allow for the rose over which you are dyeing. Then proceed to dye the tied and wound scarf. Be careful to watch the amount of color it is taking, for it is better to take the scarf out too soon and have to redip it than to dye it too dark a color.

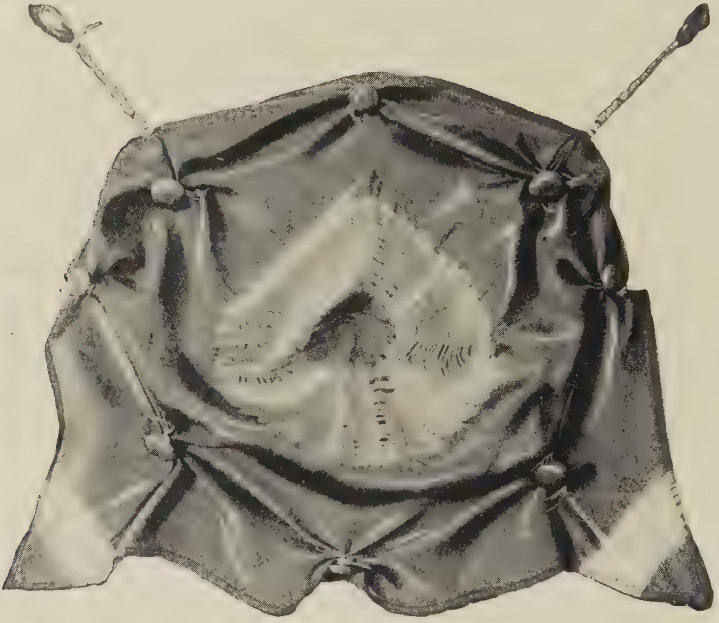


FIG. 7

The last step necessary in the completion of this scarf is to press it. A thorough ironing will be necessary in order to take out the creases caused from winding and tying.

89. **Making a Border Design.**—The scarf shown in Fig. 8, besides having a center design, is dyed in a border design, the original coloring being tan and brown.

To make a scarf similar to this, procure a square of light tan crêpe de Chine, hem it, and then mark the center on it. However, do not wind the center until after you have wound the border.

To make the border, run a basting thread around the square about 1½ inches from the edge. Then, draw up the thread and, before it is tight, insert a large spool, such as the kind on which heavy linen or cotton thread comes. Arrange the gathers on the spool and then wind the thread over these gathers for a distance sufficient to make a border of desired width. This spool is a great help in the securing of an even pattern, as it permits you to make sure that the gathers are even and that no part of the edge is caught under, where it will not take the dye. Wind the gathers the length of the spool, allowing a few openings where the dye can penetrate.

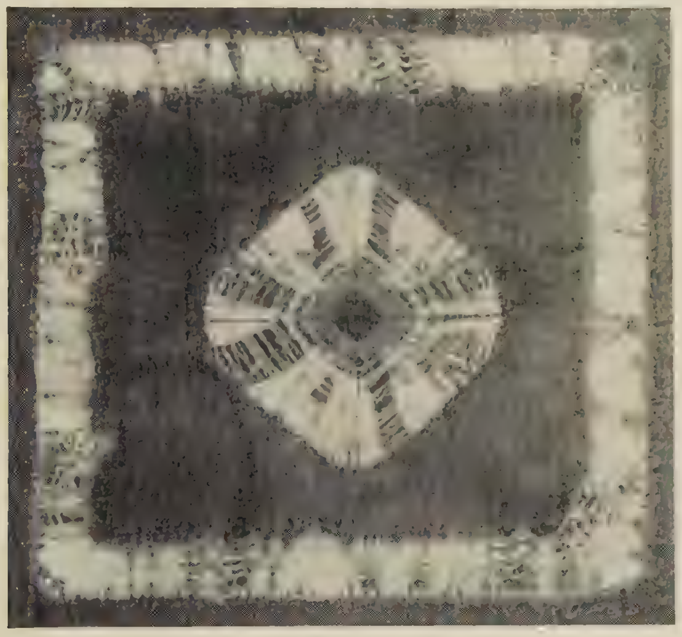


Fig. 8

Next, wind the center, as directed in Art. 87 for the purple bath of the preceding scarf, making as wide or as narrow a band as you desire. You are now ready to dip the scarf in water and then in the brown dye, which you have prepared. Stir it constantly until you are satisfied with the color; then rinse and squeeze out the water.

When the scarf is dry enough not to drip or run, unwind and dry more evenly; then iron.

90. Making a Knotted Design.—It is a matter of but a few minutes to make a scarf such as the one featured in Fig. 9, for the entire design is made merely by tying nine knots.

Tie one knot about 1 inch in from each of the four corners, then tie another knot about 1 inch farther in. For the center, tie one large knot, and you will find that nearly all of the material has been knotted.

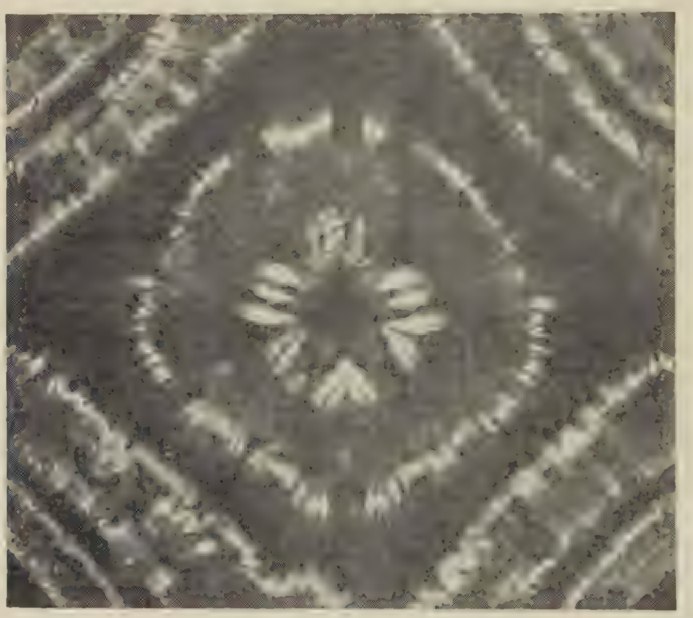


Fig. 9

Now, dip the scarf in clear water and then in the dye that you have prepared. In this case, red dye was used, producing a bright, attractive, marble effect.

If you desire to save more of the white than remains in this scarf, tie the knots more tightly so that less dye will penetrate. Or, if you do not want such a decided contrast as there is in this scarf, dip the entire square in a light pink, coral, or orange—some tone that will shade into the red without changing it.

After you have experimented a few times, innumerable designs and effects will come to your mind, each one perhaps a little more lovely than the preceding one, and each one differing from all others, for no design can ever be duplicated; there will always be some change in the shapes and tones.

91. Making an All-Over Design.—Should you desire an all-over design for some type of hat or dress trimming, you can repeat any motif at regular intervals and make countless kinds of figured materials. The design illustrated in Fig. 10 is made by tying in buttons, as in the case of the scarf shown in Fig. 4. However, all buttons must be of the same size and must be tied regularly so as to make all the motifs resemble each other closely.

Less even motifs may be obtained by tying in peanuts, collar buttons, and such objects of irregular outline. By retying and dipping in several different dyes, elaborate motifs may be secured, but it is more difficult to make them correspond to one another.

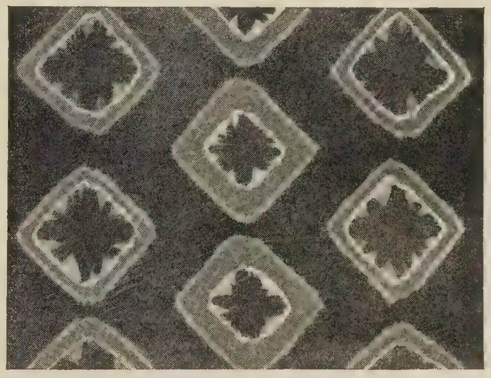


FIG. 10

92. Colors.—To the beginner, it is sometimes a puzzling matter to plan a harmonious color scheme. No set rules can be laid down as to the blending of colors, for the intensity of dye baths is a variable quantity. There are, however, charts that accompany almost all kinds of prepared dyes, and these tell what results certain colors dyed over other colors will produce or what common colors combined will make the more unusual ones. For example, dark blue, cardinal, and orange, when combined in proper proportions, make the lovely mulberry so popular for household decoration.

Also, the chart given in Art. 14 of this chapter, telling what will result when certain colors are dyed over others, will prove invaluable to the person doing this type of work.

93. If you are hesitant about devising original color schemes or feel that you are not sufficiently experienced in the combining of dyes or familiar enough with color laws, you will find Table III a safeguard in your first attempts at dyeing one color over another.

In each instance, the first column names the original background, in other words, the color of the material as you bought it or as you start to tie-dye it; the second column gives the color of the first dye bath, the second, if there is one, also the third dye bath, if there are three. A third column gives the resultant color scheme. For instance, in the first two examples given, blue materials are tied or wound and then dyed with yellow dye, the result being blue where the knots or wound portions were and green where the material was exposed to the action of the yellow dye. The first example will result in a darker color scheme than the second, because the background of the first is a darker blue; but each will be a blue-and-green combination with the green shading into the original blue where the colors meet. These suggested dye baths will serve for batik dyeing as effectively as for tied dyeing.

TABLE III

DYEING WITH SUCCESSIVE DYE BATHS

Background	Dye Bath	Effect
Copenhagen blue	Yellow	Blue and green combination
Baby blue	Yellow	Same as above, but lighter in tone
White	(1) Old rose (2) Navy blue	White, old rose, blue, and purple-blue
Yellow	(1) Light blue (2) Mulberry	Yellow, light-blue, light-green, wine-color, and dull purple coloring
Tan	(1) Mulberry (2) Purple	Tan with various purple shadings ranging from rose-purple to old-purple
White	(1) Old gold (made by mixing yellow and a little brown) (2) Blue-gray (made by diluting black and adding a little blue) (3) Henna	White, old gold, gray, green-gray, and henna

REMODELING

ADVANTAGES AND SCOPE

1. Relation Between Renovating and Remodeling.—The previous chapters concerning the care of clothing have dealt entirely with renovation by means of laundering, dry cleaning, and freshening or changing the color, but there is also the phase of renovation that begins with slight rearrangements and grows into the subject of remodeling. The renovating and the remodeling of clothing, therefore, are very closely connected, but remodeling requires more definite changes, even to the recutting of a garment.

2. Satisfaction Gained from Remodeling.—If making two blades of grass grow where one grew before is a feat to be proud of, then surely the making of a comfortable, becoming, and attractive dress from a garment discarded and seemingly useless is cause for rejoicing, and the woman who achieves this bit of success is perfectly justified in the pride and satisfaction she feels in her accomplishment. There is no doubt about the fact that it takes more brain power and work to produce a successful make-over than it does to make a lovely gown from sumptuous new material, for the pieces of material to be made over have certain set limits beyond which we may not go, while new material stretches out yard upon yard to lure the scissors.

3. Economy in Remodeling.—Not only does a successful make-over bring satisfaction to a woman's creative ability and the joy of conquest to her keen intelligence, but it has a most pleasing reaction upon her sense of economy, for it is gratifying to any woman to be able to dress attractively at moderate cost. To do this, she must know how to put to good use every garment in her wardrobe. No woman should look with disdain on the work of remodeling, for it is indeed praiseworthy for any one to give thought and effort to the making of pretty, attractive things out of clothing that has already seen considerable service, and it is an acquirable art, just as much as is the making of tempting dishes for one meal out of food left from a previous one.

4. A woman possessing the skill or developing the ability to make over garments successfully, can usually have a greater number of outfits each season than would be possible otherwise. Where economy is an absolute necessity, this procedure is of invaluable assistance. Then, too, the ability to make over clothes enables the woman of limited means to buy better materials than she would be justified in purchasing if the usefulness of the material depended on only one development of it; or, the money saved in this way may be added to the rainy-day fund or used for purchasing another new frock or something else especially desirable. It is true that many dollars are saved each year by women who are clever enough to make over their previous seasons' gowns.

There is nothing clever in wastefulness. It is a habit that fails to give the acquaintances of any woman an impression of her social importance; nor does it convince any one that her financial standing is unquestionably secure. Rather, extravagance in dress conveys to thinking persons a feeling of doubt as to a woman's intelligence. Thrift, intelligent application of knowledge, and skill with the hands are really worth-while factors in life and are recognized as such by persons qualified to judge.

So, in the interests of economy, the wise woman reconciles her desire for a smart new outfit with what is already on hand, in this way gaining the satisfaction of putting to use her ability to obtain the maximum of wear from garments purchased or made. "Maximum of wear" does not mean the continued use of a garment that has lost its style value, but rather an intelligent adjustment of a partly worn garment so that both its beauty and its usefulness are increased, and it becomes a worth-while addition to even an already well-supplied wardrobe.

5. Association vs. Changes in Design.—Probably every woman has a certain amount of sentiment in connection with her clothes. In some, this is more pronounced than in others, and with such women the question of association should not be overlooked in considering the aspects of remodeling. When one possesses a dress or a suit that has been particularly becoming, there are undoubtedly attached to this garment many pleasant recollections of happy hours and peace of mind when it has been worn. In this case, the desire to retain the garment as it is far outweighs the desire to transform it into a more up-to-date garment of entirely different effect. However, it is usually possible, by means of slight changes, to make sufficient concession to current fashion and at the same time to retain the good points of the dress which have endeared it to its owner.

6. Remodeling the Well-Made Garment.—Somewhat different from the matter of sentiment for a garment because of its associations is the question of the hesitancy that restrains some women from remodeling a well-made dress simply because it is well made. They look with awe upon any suggestions of such a procedure, seeming to feel that the garment's original excellence entitles it to a long lease on life. As a matter of fact, once it is badly out of date, no degree of excellence of construction can give a garment the value that a thorough remodeling will. It is a great mistake to keep such garments unaltered for any great length of time, for good construction in a gown is usually accompanied by good material, which should be made to give the greatest possible usefulness. But it is difficult to make them over satisfactorily after the color becomes passé or the weave of material is no longer popular.

7. Aims in Remodeling.—In all remodeling, whether for economy or for the satisfaction of producing a useful garment from a useless one, the aims to be kept in mind are *desirability*, *serviceability*, and *becomingness*. They are of about equal importance and are so closely related that it is difficult to consider one apart from the other two. For example, a garment is desirable if it is becoming and promises to be serviceable. It cannot give great service unless it is becoming and of a design that is desirable. And, of course, it is not probable that a dress would be becoming without being desirable and serviceable.

PREPARATION FOR REMODELING

MAKING A SURVEY OF YOUR WARDROBE

8. At the beginning of each season, make a critical survey of all of the clothing you have on hand, including dresses, coats, suits, blouses, skirts, and the smaller accessories. Do not make merely a mental review, but take the garments into a good light where you can study them. Make yourself ready as though you were going out, arranging your hair becomingly and wearing a well-fitted corset, underwear that conforms with the fashionable silhouette, and good street or dress shoes. Then try on each garment in turn, and observe its lines in relation to the current fashion. Note particularly what parts need to be changed or freshened, and determine whether or not cleaning is necessary and whether adding a new piece of lace or a frill, or taking off the belt, or adding a new one would remove a worn or unseasonable appearance. Simply diagnose the case of each garment—dissect it, so to speak, and note just how it may best be improved, or where a touch of becoming, seasonable color would add to its appearance.

9. Classifying Your Wardrobe.—In the light of your discoveries, classify all garments as good, possible, or impossible. Assemble them in groups, as follows:

1. Those requiring only slight freshening up, such as brushing or cleaning, tightening of fastenings, a little mending of trimmings, etc.
2. Those needing some new material, new trimming, buttons, or lining to put them into condition.
3. Those that must be ripped and made over.
4. Those that are of no value to you.

The garments in the last group should, by all means, be passed on to some one who can make use of them, for there is nothing more unkind nor unjustifiable than the hoarding of garments that are entirely valueless to the one who possesses them but that might clothe and make presentable some other human being. Instead of allowing good materials to lie useless or to make breeding places for moths, find some one who can make use of them.

In making this classification of your wardrobe, be very wise in your decisions. Do not attempt to improve a garment by merely renovating it if it needs a complete remodeling; and do not give the time to remodeling unless you are reasonably sure that the finished garment will justify the expenditure of your time and effort.

CLEANING AND MENDING MATERIALS

10. After you have classified all garments, go over them carefully, giving each the brushing, cleaning, and pressing that it requires. Very often proper cleaning will so freshen a garment that it will seem like new. If cleaning is all that is required, refer to *Laundering and Dry Cleaning* and follow the method that is best fitted to the garment in question.

Garments that are not to be remade must have any necessary mending done, such as the tightening of hooks, eyes, snaps, or buttons. If buttonholes are in bad condition and are large enough, they may be freshened by binding them with silk or braid. In the case of a coat that must be relined, much effort can be saved by removing the old lining, pressing it, and using it as a pattern in cutting the new lining. Frayed hems may be freshened by turning them a little deeper, or by cutting them off and adding a facing. Worn facings should be replaced by new ones. Other helps in the matter of mending are given in the volume, *Home Sewing*, where the different kinds of mending and their uses are discussed in detail.

STUDY OF POSSIBILITIES

11. Styles.—Having definitely decided which garments are to be remodeled, the next step is to study prevailing styles for their lines in order to produce the most attractive and modish effects possible. The illustrations in current fashion magazines are always rich in suggestions for whole costumes as well as details that may be adapted. When you find a design that appeals to you, study it carefully, keeping in mind all the while the size and shape of the pieces you have from which to cut the garment. A great deal of planning is often necessary, but it will be found in many cases that, by making very slight changes, the desired effect as a whole may be produced.

12. Materials and Colors.—Good fashion publications give also information in regard to the newest colors and materials. While it is sometimes impossible or impractical to change the color of the material to be made over by dyeing it, yet a new effect may be produced by adding a touch of a seasonable color, thus detracting attention from the color and weave of material that speaks of a previous season. But when a new color is to be combined with an old color or material, a somewhat soft tone should be chosen. Colors in good materials ripen with age, and must not be "killed" by a bright, harsh, new material.

13. Each season brings forth also new combinations of materials and colors in the same costume, a fact that offers many advantages in the making over of garments. Different materials of the same weight, as tulle, chiffon, and lace, or of different weights, as satin and chiffon, or velvet and Georgette crêpe, may be used together, as may also two similar materials of the same color, or a plain color and a checked, striped, or figured material. In combining a checked, striped, or plaid material with a plain one, the plain material should match one of the colors in the check, plaid, or stripe, usually the predominant one. A striped or figured silk of medium or heavy weight might be combined with a plain Georgette or chiffon, or a plain silk might be made up with a striped, figured, or printed, sheer silk fabric. If you use a plain color to match a stripe or plaid, rather than one to match the body of the garment, use the plain color sparingly to avoid making the dress appear "top heavy" with trimming.

Black and white combine well with many colors. Often two plain harmonizing colors may be used together in the same costume. When different materials are combined, the colors must, as a rule, be subdued in order to produce an harmonious combination, and the proper balance must always be maintained.

14. Current styles will present very few difficulties, so far as the making is concerned, to the woman who understands garment construction, and the remodeling will be a simple task once she realizes the great need of exercising good judgment in combining just the right colors and materials in made-over garments. A little more discretion and a little more skill are required for make-overs than for new garments. This phase of dressmaking, however, requires only forethought and knowledge of sewing principles and what is considered good taste in colors and combinations of colors and materials.

15. Trimmings Suitable for Remodeling.—In remodeling garments, trimmings play a very prominent part, it being possible, in many cases, to create entirely new effects. When in vogue, narrow ruffling, plaited and plain frills and jabots, plaiting, puffing, and smocking are all good as trimming. Cording, piping, shirred and tucked bands, hand embroidery, hemstitching, picoting, braiding, and braid-bound edges are often employed. Then, in accord with the mode and the season, come embroidery and lace edgings and bandings, appliqué, fringe, fur, beads, and buttons. Still other features, some of them acting as both trimming and essential parts, are listed in Art. **18.** Study the mode for trimmings just as carefully as you do for constructive features, lines, colors, and fabrics.

16. Dressmaking Accessories.—Just as each season's fashions call forth new materials, trimmings, and colors, so do they make necessary different features of dressmaking accessories as aids to developing the current silhouette. Manufacturers of such accessories are thoroughly awake to the ever-changing vagaries of fashion and never fail to have practical, and frequently most unique, articles ready for the dressmaker's assistance. The professional dressmaker, of course, keeps in close touch with the producers of such articles, and there is nothing to hinder the home dressmaker from doing the same, for the accessories are without doubt an invaluable aid to fashion and style and they are never exorbitant in price, considering their usefulness and the usual simplicity with which they may be applied.

Of particular value are bias tapes in various colors of silk and cotton, cords, braids, weights, weighted tapes, and the innumerable varieties of hooks and snaps and other fasteners. Every woman who sews should make it a part of her routine to study these aids to good dressmaking, fashion, and style just as she studies fabric, color, and design. Practical dressmaking accessories can be procured at the notion counter of any well-equipped, dry-goods store, and their advent is usually announced in the advertising columns of publications devoted to women's interests.

REMODELING FEATURES AND THEIR APPLICATION

17. Construction Features for Remodeling.—Changes of fashion are indicated by the size, shape, and length of the sleeves, the collar or neck finish, the position of the waist line or lack of waist line, the length of skirts, and the location and means of obtaining skirt fulness, all of which are construction features that change and determine the fashionable silhouette. Such changes, however, are seldom sudden or radical. Students of fashion can readily recognize them and watch their progress and development. By keeping in touch with them and watching the interesting evolution of dress ideas, the home dressmaker will find that the possibilities of dressmaking and remodeling will be made more profitable, and real pleasure will be experienced in doing work of this kind.

18. Features or sections of garments that may be altered or added to give new life to garments may be easily decided on, yet a classification of these features, as well as an idea of their usefulness, is here given to serve as a handy reference.

Blouses and dresses, skirts, and coats are considered separately, with lists under each of the construction features, trimming features, or accessories that may be added or changed to improve the appearance of them.

Dresses and Blouses

- Appliquéd sections
- Aprons
- Bands
- Belts
- Berthas
- Bibs
- Boleros
- Bretelles
- Capes
- Caps on Sleeves
- Chemisettes
- Collars
- Cuffs
- Fichus
- Flounces
- Folds
- Frills
- Girdles
- Inserts
- Jabots
- Overblouses
- Peplums
- Puffing
- Revers
- Sashes
- Scarfs
- Sleeves
- Stoles
- Vests
- Yokes

Skirts

- Applied bands or straps
- Applied plaits and tucks
- Draperies
- False hems
- Flounces
- Godets
- Overskirts
- Panels
- Panniers
- Pockets
- Ruffles
- Set-in bands or straps
- Set-in plaits and tucks
- Suspenders
- Tunics
- Yokes

Coats

- Applied bands
- Applied plaits or tucks
- Belts
- Capes
- Collars
- Cuffs
- Godets
- Peplums
- Pockets
- Revers
- Scarfs
- Sleeves
- Stoles
- Straps
- Vests

19. Subtlety of Fashion Changes.—To arrive at the best results, the real significance of the features of fashion should always be correctly understood. While some of these features are always to be found in dress, and while it is known that just so often does practically every feature of dress return to use, seldom, if ever, are they identical in form or application with earlier presentations, and the successful dressmaker is she who is quick to grasp these changes in construction or application and make ready use of them.

Thus, when fashion announces a radical change in a garment, as, for instance, the advent of full, flaring skirts when close-fitting ones have been the vogue, a person is not unlikely to think at first that a wide, flaring skirt of several seasons back may be used without alteration; yet, upon examination, it will be discovered that this old model cannot be worn in its original form. Nevertheless, it is true that it may be more readily altered to conform to the new dictates of fashion than a garment cut on straighter lines.

Similar conditions will be found true of practically every other feature of dress, for even when it is only a question of the fulness in sleeves, the length of the shoulder may be the point on which the smart, new appearance of the garment depends.

20. Blouses and Dresses.—At all times, the constructive features of garments serve some purpose, but, in remodeled garments, their purposes increase in number. Yet this fact should not be noticeable, if the garments are to have the coveted appearance of newness. Consequently, although there is a subtle reason for the presence of a bib collar on a blouse or a band on the bottom of a dress, the best of one's dressmaking skill should be brought into play to guard the secret. Any added feature, having a reason all its own, should be chosen and added so that it is a part of the design and is in harmony and perfect balance with the other parts of the garment.

21. The uses to which the blouse and dress features may be put are here explained, the terms being mentioned in alphabetical order.

Appliqué has always been enthusiastically sanctioned for use in milady's wardrobe, be she little or grown-up. And since appliquéd trimming or sections appear on the smartest of gowns as they come from the designers, surely they can, if properly used, be appropriated to cover an ink spot or a burnt place or to lengthen a sleeve or a hem.

Such things as *aprons* had too many possibilities to be connected with work hours, world without end. Now, Fashion occasionally turns to aprons to furnish interest in party gowns, incidentally offering a means of supplying front fulness, or of covering a spotted skirt, or of furnishing a reason for a belt over a one-piece dress that is one piece in effect only.

During some seasons, *bands* of self-material or another material, cut either bias or straight, are in fashion on frocks and suits. The make-over possibility in these features is readily seen, especially when some means of lengthening is necessary or when two materials are combined.

Beaded lace, *embroidered*, or *braided robes* may be used over worn foundations, really making a thing of beauty out of a shabby dress that has been cleaned and mended.

Belts, as well as *sashes* and *waist-line ornaments*, are largely instrumental in effecting style changes and freshening up dresses, giving an appearance of newness to every type of dress. Likewise, they can be used to conceal figure defects, to reduce the appearance of size in a large figure, or to increase the proportions of a slim figure.

Berthas serve to give width to narrow shoulders and to conceal the upper part of sleeves or badly shaped armholes.

A *bib* furnishes an excellent means of building up a neck that has formerly been low in front or accidentally cut lower than intended. Also, bibs share with collars and vests in the success they have in freshening up a dull and worn past-season blouse or dress.

Boleros are excellent when it is desired to cover the entire bodice portion of the waist.

Bretelles, which are cape effects extending from the belt in front over the shoulder to the belt in back, serve practically the same purpose as berthas, conceal bad shaping or piecing in the front of a waist, and give a pleasing vest outline. With the aid of bretelles, chemisettes or vests can be cut in such a way as to give an appearance of reducing a large figure or increasing the proportions of a slim one, or to effect new openings.

Capes may be employed for practically the same purpose as fichus.

Caps on sleeves are useful in showing fashion changes, in lengthening sleeves, or as a clever means of piecing materials.

Chemisettes may be used to change collar and neck finishes and to freshen up a waist or a dress.

Collars sometimes materially change the style of a garment, as in substituting a low collar for a high collar, and there is no question about a collar giving a new, fresh look to any waist or dress.

Cuffs lend new character to sleeves and can be used to advantage in lengthening or shortening, or as a means of effecting a new fashion.

Fichus are useful in concealing narrow shoulders, ugly seams at the back, worn or slightly soiled appearance at the neck and shoulders caused by perspiration or other wear, and extreme thinness. They also serve to equalize a figure where the shoulders are narrow in proportion to the hips and to effect a pleasing appearance in a maternity garment.

Sometimes *folds* of material play the same part as bands. The chief differences are that they are double, as the word implies, and that they may not be so wide as bands.

A *frill* on a blouse or a dress is, in some cases, the main feature of interest. Its position may be at the neck, on the sleeve, or down the front, and, besides acting as a trimming, it may cover up a seam, add length, or conceal a bad finishing.

Girdles, depending on their width and character, frequently give the desired style tone to a garment, and wide girdles likewise allow of piecing or serve to conceal lack of material for waist or skirt lengths.

The addition of a *jabot*, after the manner of a front frill, has the power to mark a dress or blouse as belonging to a certain season when jabots are the style.

Now and again *inserts* of lace, embroidery, or novelty materials, find their way into blouses and dresses, and certainly there is no better way of joining small pieces of material, or enlarging garments at the seams.

Overblouses help to combine two materials and give an appearance of completeness to a costume. They likewise serve to conceal piecings and partly worn underblouses, and can be made to conceal defects of figure.

Peplums are strong features in fashion changes, and may be made, by their length or fulness, to reduce or increase in appearance the size of the hips and to cover ugly piecing or bad shaping in skirts. Peplums are useful when two materials are required for making-over purposes. They give an appearance of completeness to very plain dresses and are useful for extremely slim figures.

When *puffing* is in style, it furnishes a means of lengthening or enlarging, and also of concealing seams or piecings.

Particularly when mannish effects are in vogue, *revers* are adapted for use on frocks. The altering of a tailleur so that it carries this style is all that is essential to bring some dresses up to date.

Sashes serve much the same purpose as girdles and belts.

Scarfs may be made to serve the same purpose as fichus.

Often dresses and blouses can be dated by their *sleeves*, so changes in these features are very important. Then, too, sleeves can always be added or subtracted as well as altered.

Stoles conceal soiled or ugly shapings at the neck and front, and have a tendency to give length and slimness to short, stout figures.

Vests freshen up soiled neck and front appearance, conceal bad shapings, and can frequently be used as a method of increasing the size of a garment.

Yokes may be used to change the shape of a garment or as a trimming application.

22. Skirts.—Features for remodeling skirts may be made to serve as follows:

Applied bands or *straps* conceal piecings or worn places, and make the combining of materials attractive.

Applied plaits and *tucks* conceal piecings, make a pleasing application where two materials are combined, and may also be used to conceal worn places.

Draperies, while they serve a purpose similar to overskirts and tunics, have the added advantage of concealing the defects of a figure, reducing the appearance of a large figure, and increasing the proportion, or appearance of proportion, in a slim figure.

False hems and *novelty hem finishes* make possible the adding of necessary length to skirts and are likewise used to advantage in the combining of two materials.

Flounces add length, give a bouffant or flaring effect when this is desirable, and may be used to change radically the shape of a skirt or the proportions of a figure.

Godets give width and a circular effect; they are also good as trimming when increased size is desired.

Overskirts allow of the combining of two materials and may be combined with a close-fitting skirt that is to be used as a foundation.

Panels make possible greater width of skirts.

Panniers serve much the same purpose as overskirts, either of which may be used advantageously when Fashion decrees that a bouffant effect in skirts is desirable.

The addition of *pockets* on a skirt when it is made over can make a skirt present an entirely different appearance. They also can cover worn or soiled spots.

Ruffles, so far as usefulness is concerned, belong in a class with flounces.

Set-in bands and *straps* serve a purpose similar to applied bands and straps and, likewise, are useful in increasing width or length.

Suspenders, when in fashion, may be used to change the style effect of skirts. They also make possible the wearing of blouses that could not be worn otherwise.

Tunics serve a purpose similar to that of draperies and overskirts.

Yokes on skirts give additional length and allow of new shaping at the waist and hips. They may be of a character to reduce or increase the appearance of hip measurements and are useful where two materials are combined.

23. Coats.—The manner in which features for remodeling coats may be utilized is as follows:

Applied bands, *plaits*, or *tucks* are useful as trimming to cover seams, piecings, and worn places.

Belts are useful where changes in fitting are necessary and where a radical change in the style of a garment is desired without resorting to complete remodeling; as, for instance, a belt may be added to a loose or a semifitting coat to give it a closer waist line.

Capes serve a purpose similar to that of collars, being likewise useful in concealing shoulder width, sleeve and armhole shaping, and in developing a decided style tendency, such as increased width to the upper portion of a figure.

Collars are useful in freshening up a garment or in changing its shape or style, as a trimming application, or a means to good taste, where two materials are to be used.

Cuffs add length and give style changes to sleeves.

Godets serve to give width and a circular effect to coats when Fashion demands this silhouette.

Peplums will lengthen the appearance of a coat and can be made to increase the proportions of slim figures or reduce the proportions of large figures.

Pockets, when in vogue, may be used to give an effective and a smart touch to a coat.

Novelty *revers* are sometimes used on coats instead of the usual conservative revers, and these are often helpful in taking away any scant appearance in the front.

From time to time, *scarfs* are considered the finishing touch to a coat. When this is true, no feature could be more acceptable, because they can entirely conceal an out-of-date collar or neck finish. The way they fall down the front also conceals a too-snug or an ill-fitting front.

Sleeve piecings and alterations may often be concealed by trimmings that have a certain style or fashion value.

Stoles are employed in much the same way as collars and also as a means of decoration when they are finished with hand embroidery or braiding. Frequently, stoles are very good for stout and mature figures where there is need of long lines from the shoulder to the waist or to the lower edge of a full-length or slightly shorter coat.

Straps applied to a plain coat give a Norfolk effect, as do also applied-plait sections. Such features may be used also to conceal piecings and seams.

Vests serve to freshen up a coat, make possible the elimination of a worn or badly constructed closing, increase the size of a coat, or act as a trimming effect, giving a certain dressed-up appearance that cannot be obtained from a coat with regulation single-breasted closing.

24. Veiling Garments.—The veiling of garments is a great help to remodeling. Thus, if a half-worn dress of silk, satin, brocade, or taffeta is at hand and the desire is not to recut it, it may be veiled with net, chiffon, all-over lace, Georgette, or fine voile, according to taste and the current mode. In this way, a very handsome gown may be inexpensively made.

Any color may be veiled with the same color, either in a lighter or a darker tone. Light blue, amber, canary, salmon, heliotrope, maize, cerise, and rose may be veiled with black or white. A more difficult problem is to veil one color with another; in fact, good judgment is required to do it successfully. As examples, green, rose, pale yellow, turquoise, or red may be used either under or over gray; yellow may be veiled with brown; rose, vivid red, and green, with dark blue; and gray, rose, mauve, and white, with green.

Over plain colors, two-tone changeable chiffons, voiles, and Georgette, matching in one tone or the other the color of the foundation dress, may be used. A plain dress of white or black or of a color sufficiently vivid to contrast sharply with it may be veiled in black; and when a black or a white foundation is veiled with black, a third color, such as Chinese blue, peacock blue, emerald green, corn color, gold, old rose, or scarlet, may be used for the waist-line finish or as a part of the trimming. When a brilliant color is veiled in black, the color itself may be used in the trimming.

GENERAL RULES

25. The rules and hints relating to remodeling in this chapter are necessarily made as broad and flexible as possible, and should, therefore, be applied discriminately to individual requirements. By so doing, you will find it an easy matter to work out minor details that will be suitable to the needs of each garment.

Following is a summary of helpful general rules for remodeling. Study these carefully and apply them wisely.

26. Treatment of Materials.—Always prepare carefully new material that is to be combined with old fabrics, treating it to a sponging process or to steaming, if necessary, so that it will not contrast too definitely with the old material. A procedure of this kind is generally more necessary where fabrics of the same quality and weave are combined than where different qualities and weaves are used together.

Thoroughly clean and press old material to be used.

Make use of the dye pot. Good materials, discarded because they are faded or streaked or of a color no longer fashionable, may be restored by a few cents' worth of dye and a little time. Complete directions for using come with each package of dye; also, Chapter III is given over entirely to this subject.

27. Selecting Patterns.—Before selecting the pattern you are going to use, look through your fashion magazines, for these will suggest many ideas.

Two-fabric designs, especially, offer no end of possibilities.

Use simple patterns. Old material, unless very rare, seldom merits the outlay of time and energy necessary to make an elaborate garment.

28. Utilizing Remnants and Materials On Hand.—Learn to make the most of remnants. These may often be purchased for a small sum, and, when used with old material, produce very desirable effects.

Very often a half yard or more of material is left from a dress. Keep this until you are able to combine it with another similar remnant, or to use it with used material.

Not infrequently the materials from two old dresses may be used to develop one new frock, provided they blend in color and harmonize as to design or pattern. If, however, new material is to be combined with that of an old dress, it is best to select a quiet or subdued color that will not glaringly proclaim its newness and thus mark the garment as unquestionably made over.

29. Ripping Apart Garments.—Save time by cutting close to seams instead of ripping, if the material in the seams will not be needed.

If it is necessary to save the material in the seams, you must, of course, rip them. There are several methods of ripping machine stitching, but the one to use generally is governed by the fabric and the length of the stitch. A method that is usually satisfactory consists in pulling one end of the thread (upper or lower), drawing it up as far as possible before breaking it, and then drawing one end of the remaining thread in the same manner.

Another method is to use a sharp knife with a small blade, or a safety-razor blade, drawing the material apart so that the stitching may be cut through the center. In this method, it is necessary to go over the ripped section a second time to remove the clipped threads. In ripping, care must be taken not to clip the material nor to stretch any bias or irregular edges.

30. Recutting.—As a rule, it is an easy matter to cut down—that is, to make a closer-fitting garment from a full one. But when the change is the reverse, the task is more difficult, and in this connection it is necessary to employ various methods of lengthening, of broadening, and of concealing pieces and places where materials are combined.

Recutting and contriving require patience and ingenuity, particularly if the material to be used has a figure of any kind, is a plaid or a stripe, or has an "up and down." In such cases, it is necessary to follow very closely the grain of the goods, as well as the figures, plaids, and stripes, matching them when necessary.

With plain material, the exercise of such great care is not so necessary, for if some of the pieces are a little bias, or are used on the crosswise grain of the goods where they can be covered with trimmings, the difference does not amount to so much. If the material used is plain and has no right or wrong or up and down, the possibilities for making over are greater than when matching must be done.

In any event, do *not* cut *anything until all pieces have been planned for*. Sometimes the pieces can be arranged a second time to much better advantage than at first. A good plan is to begin by picking out the longest pieces of the pattern and choosing the material for them, and if piecing must be done, it is always best, when possible, to piece lengthwise of the material.

Mark thin or badly worn spots with thread or chalk. Then avoid these in cutting, if possible. Carefully darn them if their use is unavoidable.

When there seems to be no way of remodeling a garment for an adult, try to plan a way of using it for a child. As a rule, a garment can be cut down to a child's size with a smaller outlay of time and energy than would be necessary to remodel it for an adult.

31. Remaking.—New seams help to "perk up" an old garment, so often recutting and making new seams will make a garment as good as new.

When piecing is necessary, it may be done so cleverly in many cases that no one need be the wiser. Tucks and folds are invaluable when used to this end. Also, lace insertion or entre deux may be so used as to make trimmings a feature of the piecing. Braids and bandings cover a multitude of seams.

It is necessary, in combining two materials, to exercise great care and thoughtfulness so as to acquire the right proportions and balance. The lines must be such that the design is "tied up" or held together, thus avoiding a "patchy" or spotty effect. A well-thought-out make-over is frequently even more effective than the original dress.

32. Trimmings.—Choose trimmings with a view to smart effect, avoiding those whose quality is so fine that the contrast with the material will emphasize its age.

The opposite grain of a material, like bengaline, may be used as a trimming. The right and wrong sides of crêpe satin may be combined with good effect.

In remodeling or freshening a garment, it may be necessary to resort to left-overs in trimmings, such as silks, chiffons, nets, laces, and pieces from the scrap bag, particularly if they are of bright colors; and if you have the whole array of garments and trimmings before you, you can see just what you have of each kind—the weight, color, and quantity—and can then intelligently adapt them to the required purpose and possibly procure new things that will combine to better advantage with what is at hand.

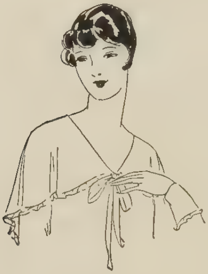


FIG. 1

When the collarless dress begins to show wear across the shoulders, it need not be discarded. Merely supply it with a becoming collar and matching cuffs of Georgette. The type of collar shown in Fig. 1 is particularly becoming to the slender figure.

33. Need of Consistency.—The principal point to remember regarding garments that are much worn is to make as little unnecessary alteration as possible, for ripping apart means an expenditure of time and labor and usually unwarranted expense in buying new materials. The art of making over lies in disguising the fact that the garment is remodeled. The ultimate effect, even on much worn garments, should be the mark of inspiration and not that of necessity. If a woman feels that they are just old things and that anything will do, the finished product will very likely be disappointing; if the material is worth making over, it is worth the effort that would have to be put forth in making a perfectly new dress.

EXAMPLES OF REMODELING

USING UNSEASONABLE SUITS

34. Preparation For Recutting.—As a suit made over usually emerges from the process as a dress, one must invariably dismiss all idea of using any of the seams as they are. The severing of its parts must be complete, for coat shoulders are broader than those of dresses, and all seams have a perverse way of coming at the wrong places.

Before ripping the suit, however, examine it carefully to decide whether or not the condition of the material is such that it will warrant a considerable amount of time being spent upon it, and also to determine the relation of the sections of the suit to the pattern pieces of the design you wish to copy. If the answers to these questions are favorable, it is safe to go ahead with the original plan of developing a dress from a suit that can no longer be considered either smart or becoming.

In this, as in all cutting of garments, lay the pattern pieces on the material and be sure you know that each piece is accounted for before you do any cutting.

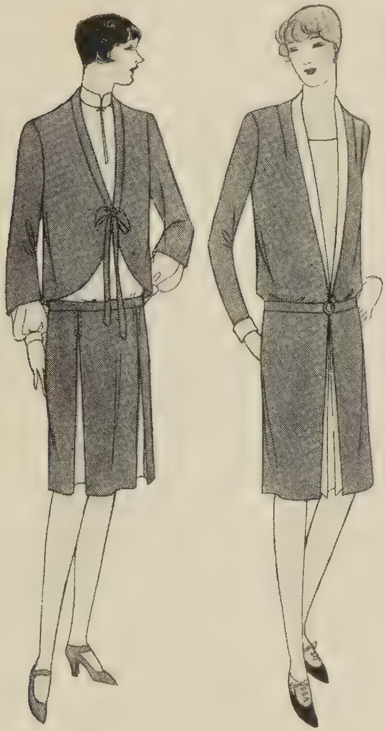


Fig. 2

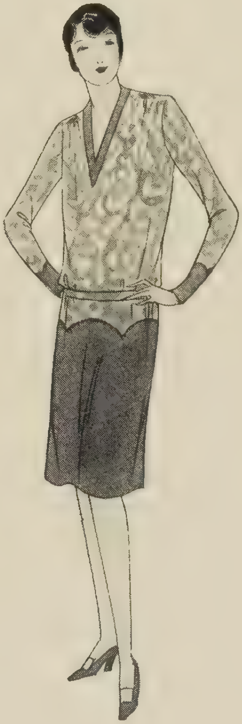


Fig. 3

35. Making One-Piece-Dress Effects.—If a dress of one-piece effect is the end in view, it may be accomplished by covering the necessary joining of the blouse section to the skirt with a belt, either of the material or of leather. Very often the addition of a contrasting material, plain, figured, or plaid, is a great help in eking out the available material, particularly if the coat is one that is cut in narrow pieces.

If original thought and really sincere effort are put to the task, the very limitations imposed by the size and the shape of pieces, often lead to the development of effects that are very desirable and that would not have been conceived otherwise. This is particularly true in the case of the two dresses illustrated in Fig. 2.

If the suit is not badly out-of-date, but a change seems, nevertheless, desirable, the coat may be worn as it is, and a blouse of harmonizing plain or figured silk material may be attached to the skirt, after the belt and upper section of the skirt have been cut away. Fig. 3 suggests a one-piece possibility of this kind.

36. Sleeve Possibilities.—Suit sleeves often present perplexities because of their two seams. These seams need not be objectionable, however, even in the dress sleeve. In preparing the sleeve for recutting, rip the full length of the seam that comes toward the front; the other seam need be opened only far enough to allow the sleeve to lie flat. Fig. 4 shows such a sleeve ripped in this manner with the dress-sleeve pattern placed over it in readiness for cutting. When the under-arm seam is joined, the back seam may be finished with a placket, a neat, close-fitting sleeve resulting.

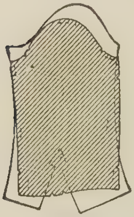


FIG. 4

37. Neck and Front Finishes.—Neck lines and front finishes frequently require especial attention because of buttonholes, or of the failure of the original lines to assume the desired outline. There are several remedies for defects of this kind. If the buttonholes cannot be disposed of either by cutting them away or by working them into the design of the dress, they may be covered by a jabot when such a feature is fashionable. A surplice front with a long roll collar or a contrasting lapel is often used as a means of covering the buttonholes. If these are not seasonal, the center front of the blouse section may be cut away and a vest of lace, batiste, or other similar material may be inserted. If a slenderizing line is desirable, both the blouse and the skirt may have a section cut from the front, and a panel of contrasting material inserted the full length of the dress. Such a panel may be buttoned down the center in coat effect, or it may be in one piece, with the edges of the dress proper lapping over it in the form of plaits.

38. Using Shiny Skirts.—When the skirt of an old suit is shiny from much wear and the material cannot be turned, the effect may be relieved somewhat by pin tucking it, provided this does not interfere with the general effect of the design.

If the skirt is so shiny or worn that it no longer matches the coat, which is still in good condition, the latter may be made into a likable dress for a child by using a plaid or figured material in combination with it. One method of using this idea is to insert godets of the plaid material both front and back on the seam lines of the coat.

USING MEN'S SUITS

39. Making Boys' Suits.—When a man's old, half-worn suit is brought out of the storage chest and considered for renewed usefulness, the small boy of the family is almost sure to emerge a short time later in a new suit looking suspiciously like the original as to material and color. A man's suit seems to be made for the one inevitable end of being reduced in its last days to the proportions of a small boy's suit.

If one were to follow the intermediate processes, they would be found to consist of the usual ripping, cleaning, pressing, and laying on of patterns that accompany all remodeling. The various pieces of the boy's coat are cut from the corresponding parts of the large coat. Small trousers are cut from the larger ones, and sometimes, if the boy is very small and the trousers are not too well worn, there proves to be enough material for two pairs of trousers.

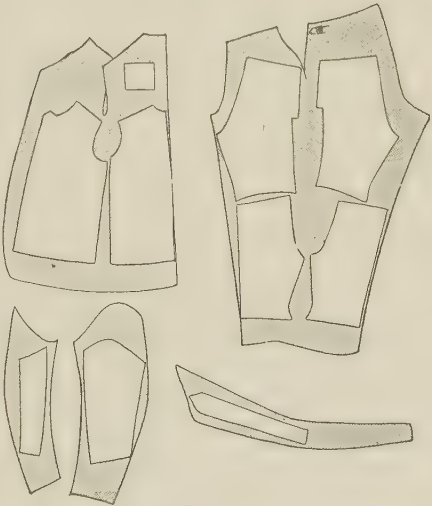


FIG. 5

Fig. 5 shows the pattern for a boy's two-trouser suit laid on the ripped-up suit, and Fig. 6 shows the resulting suit for the child. The piqué vest and collar give an air of fresh newness to the suit.

40. Making Girl's Plaited Skirt.—If there is no son in the household, but there is a little daughter, she may have a plaited skirt made from the trousers of a man's suit, for the piecing seams are easily concealed in the folds of the plaits. And it is quite possible that a slip-on blouse of middy type can be made from the coat. It may be brightened up considerably by trimmings of red, green, or gold flannel.

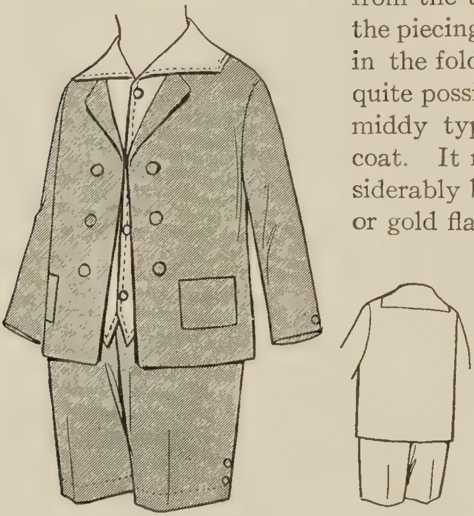


FIG. 6

Before cutting over a suit for a little girl, be sure that the material is appropriate. Serge and similar materials are splendid, but some suits cannot be cut over for little girls because the material is sure to advertise its origin. That, of course, would cause the sensitive child much needless pain.

REMODELING DRESSES

41. Features Considered For Remodeling.—Though there are a great many kinds of dresses, each with its own individual details, yet all dresses have a few features in common. The features may differ, but nevertheless they are there. For instance, all dresses have length and width, though they may vary as much as 15 inches in length or 2 yards in width. Every dress has some sort of neck finish and some kind of sleeves or provision for the arms. And every dress has its waist line characterized by some kind of belt or sash or the straight silhouette that denies the existence of a waist line altogether.

It sounds paradoxical to say that the details which dresses have in common make them different, yet this is precisely true, for it is the change in the shape of the collar, the length and fulness of the skirt, the placement of the waist line, or the type of sleeves, that marks a dress as being of the mode or out of it. And so these are the features to consider when a dress is to be remodeled for the purpose of bringing it up to date.

42. Lengthening and Shortening.—Common means of lengthening a dress are as follows:

Adding contrasting bands at the bottom or inserting them becomingly through the body of the skirt.

Adding a section of the dress material and concealing the joining under a tuck, a band of trimming, or a touch of embroidery.

Using the old skirt as a tunic and wearing it over a longer, narrower skirt.

Adding hip-yokes when in vogue.

Ripping the hem and adding a facing, if the skirt is not a great deal too short.

Skirts that are too long offer no such problems, as it is a simple matter to cut off the length that is not needed. The only time for hesitation is when you are deciding whether to take the length from the top or the bottom.

In the case of a plaited skirt, a bordered skirt, or skirt otherwise trimmed at the bottom, or a skirt with stitched-in hem that you would rather not rip out, cut off the top of the skirt.

A gored skirt should always be shortened at the bottom, unless it has become too snug at the hips and must be raised to supply plenty of room.

43. Changing the Skirt Width.—Skirts that are too narrow may be increased in width by slashing them from the bottom and inserting plaited sections or circular godets, depending on the current fashion. If panels are fashionable, the sections of the old skirt may be used as panels over a new foundation skirt of contrasting color or material. Also, gored skirts, if long enough, may be raised at the hips.

Skirts that are too wide may have their excess fulness plaited in or removed entirely by cutting some of it away.

44. Neck lines.—The most common neck lines are round, bateau (boat shape), square, V shape, and surpliced, which is just a variation of the V neck. Much variety is possible with these shapes by using collars of different types, or by leaving the neck line collarless.

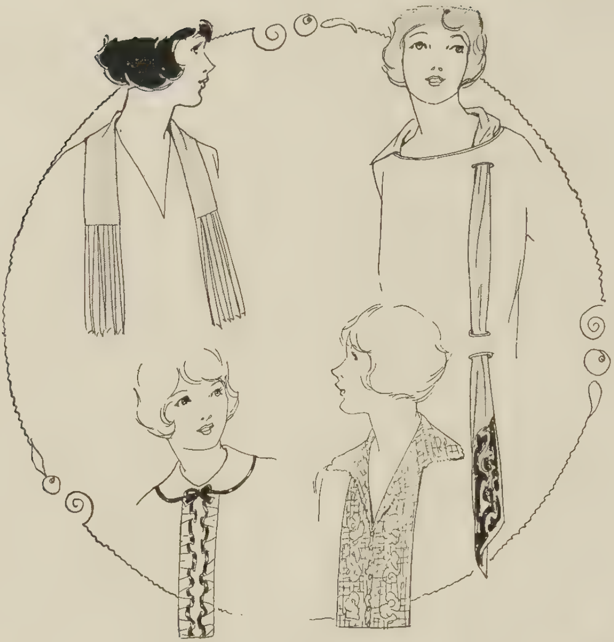


Fig. 7

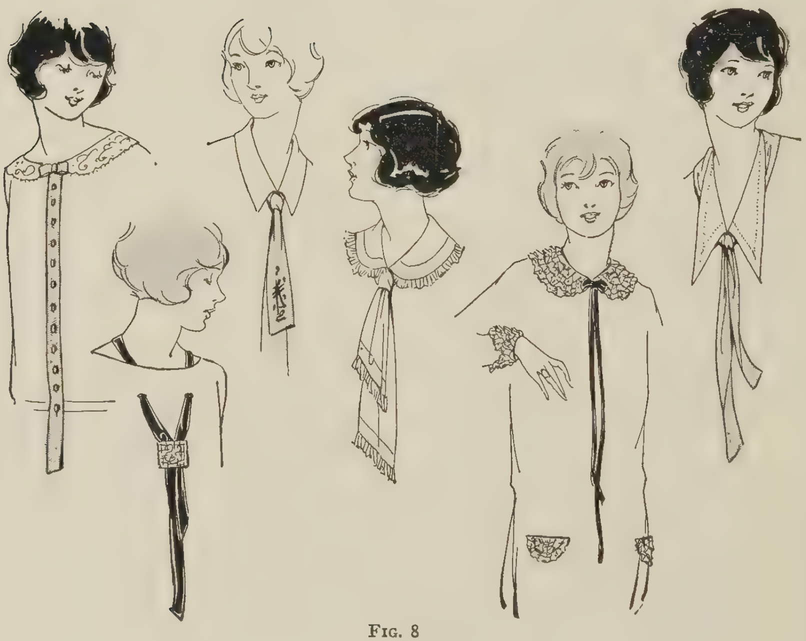


Fig. 8

A high neck line may be changed by cutting it lower. A low neck line may be built up by inserting fitted pieces and covering them with a collar, or by changing the shape, if necessary, and filling it in with a yoke of lace or chiffon or softly shirred net or tulle. The addition of a scarf often proves sufficient change if the neck line is not definitely out of style. Figs. 7 and 8 offer suggestions for various neck finishes.

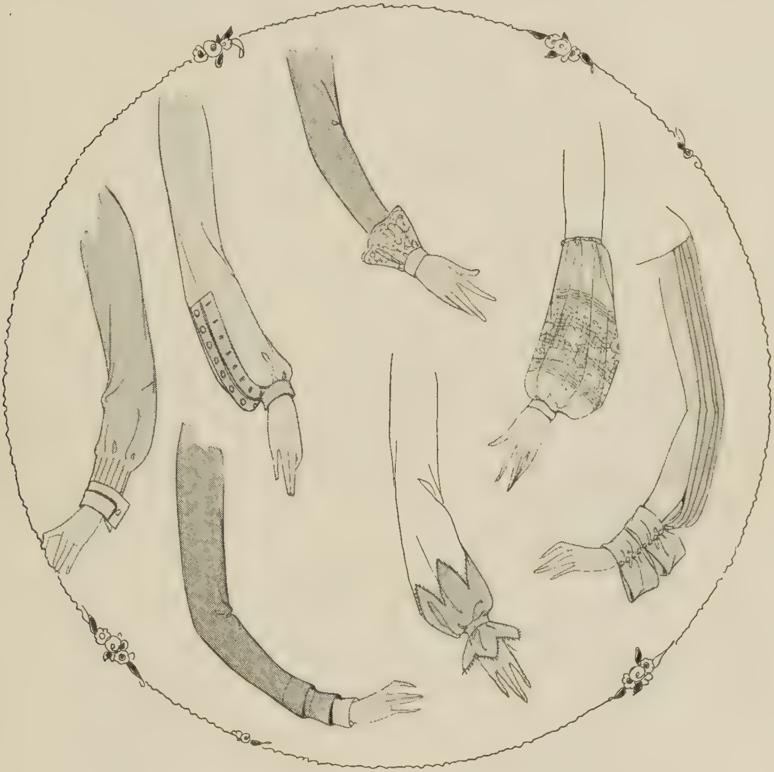


FIG. 9

The effect of a whole dress may be changed by changing its neck line. So, study the prevailing fashion in neck lines, in order that any changes you make will be fashionable. Also, before making changes, study your own type with a view to determining the most becoming shape.

45. Sleeve Changes.—Sleeves date a dress by their length and their fulness. Short sleeves may be made long by the addition of transparent or heavily embroidered sleeves in bishop effect, or by joining a section of self-material and covering the joining with tucks or some other trimming feature. Three-quarter-length sleeves may be changed by the addition of full, lacy sleevelets, by adding deep

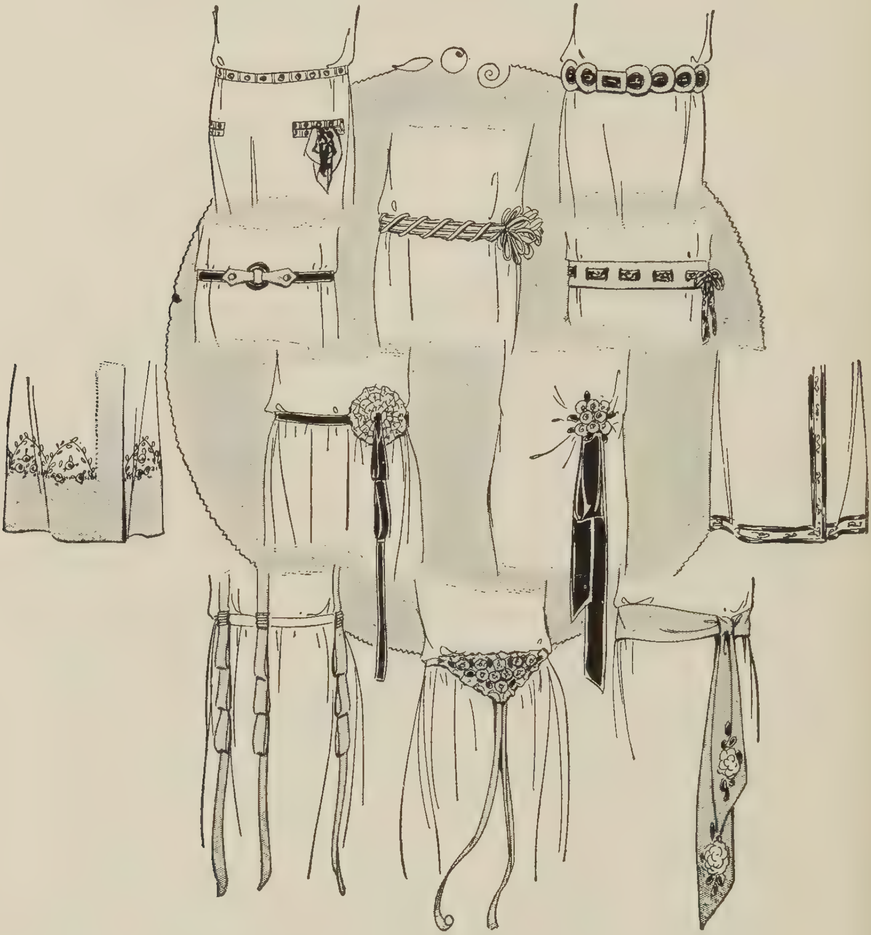


Fig. 10

cuffs, or by joining sections of self-material as just suggested for short sleeves. Or, if short sleeves are preferred, long ones may be cut off and finished to harmonize with the dress. Narrow sleeves may be increased in width by slashing them and inserting material that matches or contrasts. Plaiting this section often takes the curse off a change of this kind by removing the mark of necessity. Fig. 9 shows a variety of sleeves that offer many suggestions.

46. Changing Waist Lines.—The waist line is probably the most difficult feature of a dress to alter satisfactorily without entirely recutting the whole garment. It may offend by being too high or too low, too tight or too loose. Of course, if the position of the waist line is due entirely to the placing of a loose belt, the belt can be raised or lowered very easily. But if the dress is cut across at the waist line, the matter assumes a different aspect. If a high or normal waist line of this kind is to be lowered and there is available material, a wide, straight band, perhaps on the opposite grain, may be added to the bottom of the blouse. As a rule, however, recutting is the only remedy.

A waist line that is too low may be cut higher, provided there is some means of adding more length to the skirt. Just what this means should be depends entirely on the type of the dress.

When waist lines are drawn in too tightly, it is usually possible to let out some fulness and so produce a newer effect. If, on the other hand, the dress falls too loosely over the waist line, draw it in with a belt or with gathers, tucks, or plaits, or by taking in some of the material in the seams.

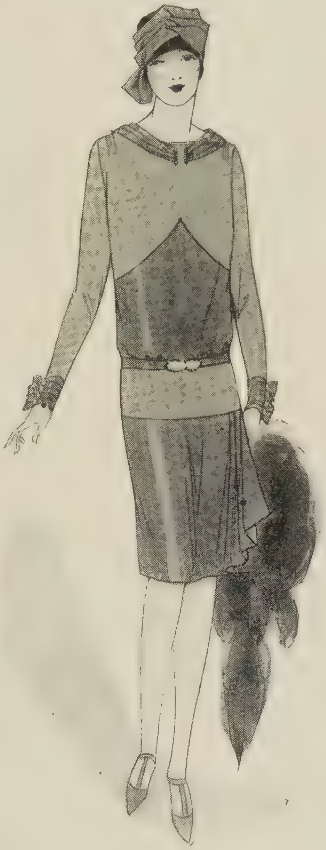


Fig. 11

If the waist line is neither too high nor too low, too tight nor too loose, but still a change seems desirable, the suggestions in Fig. 10

should prove helpful. Two hem finishes, which may be repeated on the sleeve, cuff, neck, collar or as a waist-line trimming, are shown at the right and left of the center of this illustration.

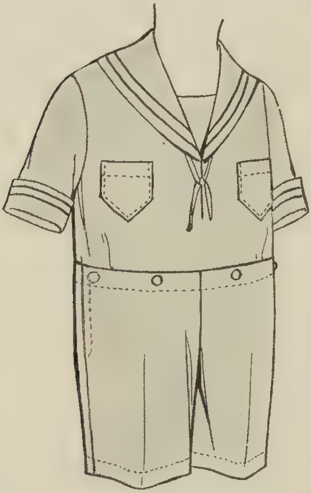
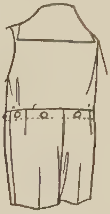


Fig. 12



47. Making One Dress From Two Dresses.—If none of the changes suggested serve to make the dress usable, the only means that remains is to rip the dress apart and plan to recut it. Two old dresses sometimes harmonize or contrast well enough as to color and material to be combined with pleasing effect. A plain or figured silk may be combined with a plain woolen material very successfully. As a general rule, use the heavier-weight material for the skirt or lower portion of the design. Fig. **11** shows a design developed from the combination of two dresses.

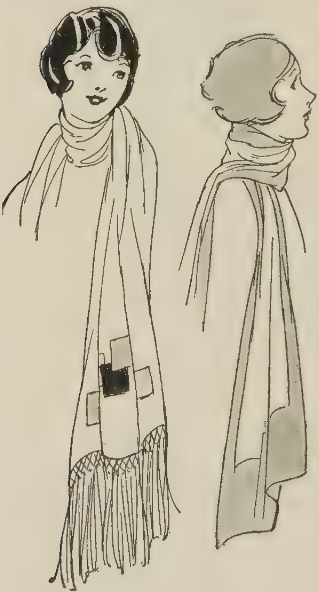


Fig. 13

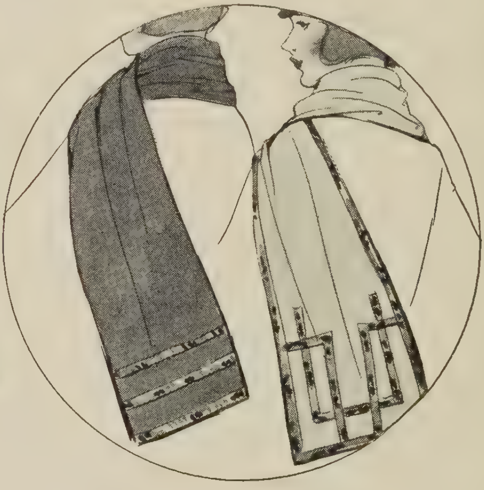


Fig. 14

48. Cutting Down Dresses.—If there is not another dress to combine with the material, or if it does not seem to merit new material, cut it down for a child.

Little boys love sailor suits and they are very becoming to the child of eight or under. Many cloth dresses have in them enough material of a kind suitable for such suits, one of which is illustrated in Fig. 12. The darker colors, such as navy, brown, and dark green, are most appropriate, although tan may be used. Other light colors may be dyed a darker color if the material is good. To add to the color interest and brighten up such a suit, it may be trimmed with braid in red, blue, yellow, white. or black.

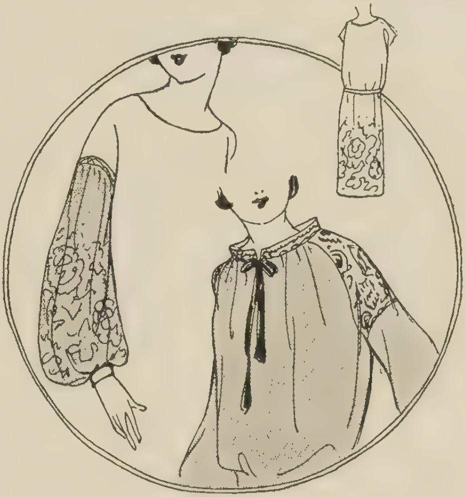


FIG. 15

49. Uses For Silk Dresses.—Georgette panels removed from made-over dresses make lovely scarfs if finished with fringe or contrasting hems, as in Fig. 13, or decorated with narrow ribbon, attractively applied, as in Fig. 14.

The skirts of dresses that are made of Georgette, crêpe de Chine, or any similar material and heavily beaded, may be recut and made into sleeves of the bishop type for new or made-over dresses, as is illustrated at the left in Fig. 15. The dress from which the sleeves were cut is shown in the upper right corner.

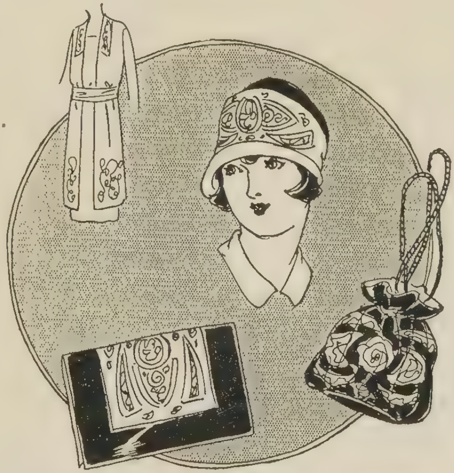


FIG. 16

Many silk dresses are trimmed with hand embroidery. When it comes to recutting the dress, the using of embroidery is sometimes a problem. The blouse at the lower right of Fig. 15 shows one attractive application of this trimming. Bags and hats may be decorated with embroidery cut from silk or cloth dresses. Fig. 16 shows two types of bags and a hat trimmed in this way.

Silk dresses make acceptable underskirts or bloomers if the material is strong, yet unseasonable for outer wear.

50. Uses For Lingerie Dresses.—Lingerie dresses offer endless possibilities for recutting into lovely underwear. The material must be strong, of course, to merit the work being put on it. Another use for the hand embroidery and lace of lingerie dresses is illustrated in Fig. 17. This shows a dresser scarf and matching pin cushion trimmed with the elaborate front panel of an old-fashioned princesse dress. The outer edges of the scarf and cushion are bound with a color.

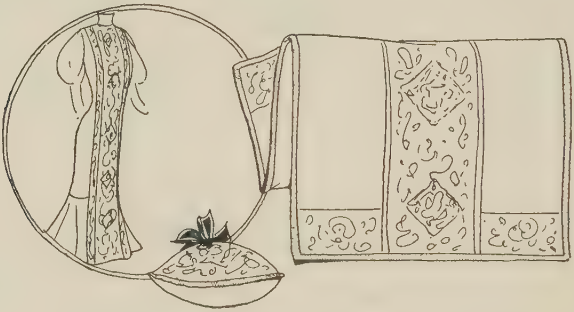


FIG. 17

Very often the blouse part of a gingham dress wears out before the skirt, and the skirt fades so badly that it cannot be used again as a garment. Such a skirt may be made into bags to hold dusters, clothes pins, laundry, and the like.

USING DISCARDED BLOUSES AND WAISTS

51. Uses of Silk Blouses and Waists.—Silk blouses of dark or bright colors may be combined with old silk or wool dresses and serve as the trimming on the "new" dress. If there is good embroidery or other trimming on the blouse, it can be worked into the dress by careful planning, provided, of course, it is the type of embroidery that is appropriate as dress decoration. A pocket and cuff and a neck finish using hand-embroidered motifs from an old garment, are shown in Fig. 18. Elaborate bishop sleeves in a blouse may be transferred to the dress without any change. It is sometimes possible to cut pastel crêpe de Chine blouses over, making camisoles or other small pieces of lingerie.

52. Cutting Down Tailored Blouses.—Simple tailored blouses may be cut down for young girls who can then wear them with jumper dresses or suspender skirts or under sweaters.

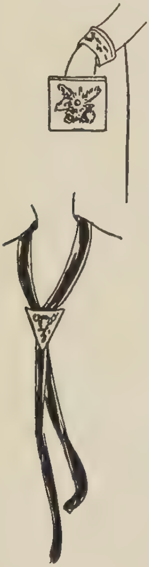


FIG. 18

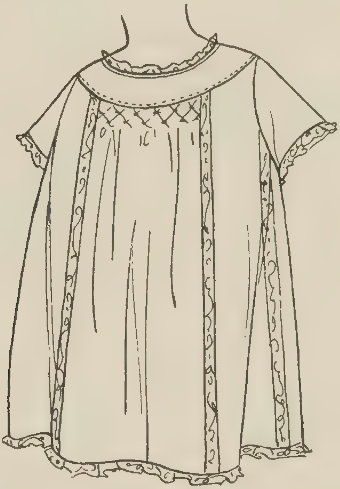


FIG. 19

Fig. 19 shows a dress for a child made from two tailored pongee blouses. To give necessary length, a round yoke is used in the front. The narrow pieces obtained from the blouses are joined with lace insertion.

53. Uses of Lingerie Blouses.—Lingerie blouses are just brimming with possibilities. The fronts of hand-made, lace-trimmed voile blouses may serve as vests in cloth dresses, or as trimming for chemises or step-in suits. Both of these uses are illustrated in Fig. 20.

Never throw away good hand embroidery. If it cannot be used as it is, cut the motifs from the material, and appliqué them to some other garment or household article. The list of possibilities is almost endless, but a few hints will suggest other things, and before you know it you will be originating uses for every precious scrap of embroidery in your storage chests.

Time was when waists had high collars trimmed with embroidery and lace. One of these collars, sewed to baby's bonnet so that it turns back, makes a lovely frame for the dimpled, pink face. Two such bonnets are shown in Fig. 21, which shows also a baby's bib cut from an odd piece of embroidery.

Some lace collars have possibilities as nightgown yokes or trimmings for children's dresses, as shown in Fig. 22. Such lace should be firm enough to stand the strain it will suffer.

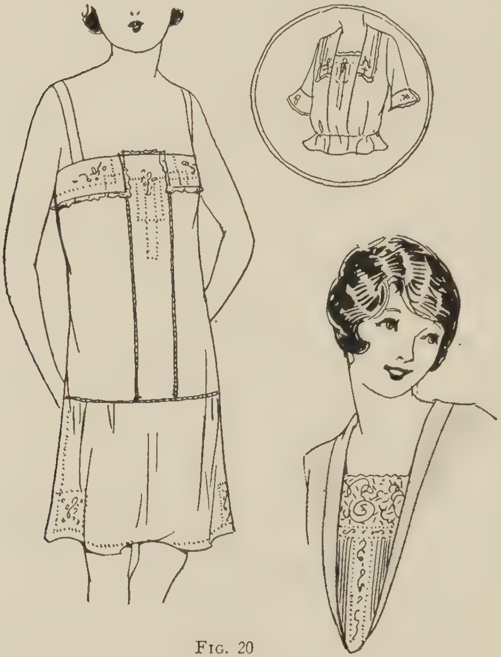


Fig. 20

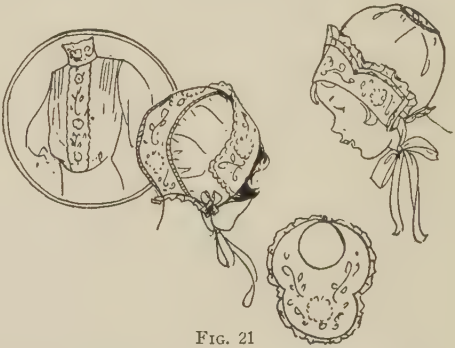


Fig. 21

54. If there remains, from the era of the hand-embroidered shirt-waist, a relic, elaborately embroidered in front, and buttoned down the back, rejoice, for it will make a beautiful boudoir pillow. Simply cut it heart-shape, triangular, circular, or rectangular (the embroidery will suggest the shape), make a back of similar material, and edge it with Val lace. Some designs are adaptable to baby pillows. If the embroidery is arranged in long, narrow panels, these may be used to decorate the ends of a dresser scarf and to make a matching pin cushion.

Some nightgowns are just as adaptable to the making of pillows as are blouses. Three kinds of pillows that may be made from blouse or nightgown fronts are illustrated in Fig. 23. If the embroidery is in scraps too small to make a pillow, they may be joined with entre deux, hemstitching, or lace insertion, as shown in the rectangular pillow.

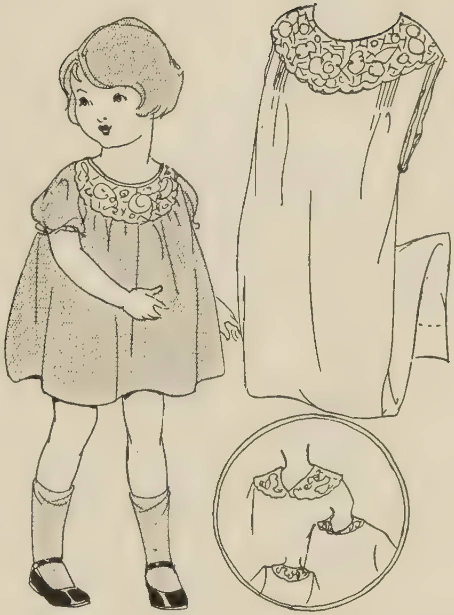


Fig. 22

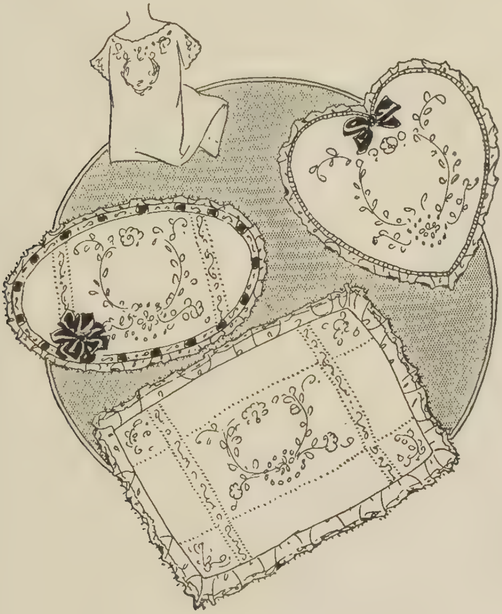


Fig. 23

Another use for the embroidered shirt-waist is shown in Fig. 24, where the hand-work is used to trim the nightgown case shown at the left. Small scraps of embroidery that cannot be utilized otherwise may be joined with lace or entre deux or appliquéd to other material to make handkerchief and powder-puff cases, such as are shown at the right and the lower center.

55. Novelties From Embroidery and Trimmings.—Very "Frenchy" looking, dressing-table accessories may be made by gluing little odds and ends of lace, embroidery, hand-run pin tucks, gold braid, tiny rosebuds and ribbon bows to powder boxes, cold cream jars, and perfume bottles. Milliners' glue is the most satisfactory kind to use. A group of these articles is shown in Fig. 25. Particularly lovely pieces of embroidery and lace may be joined together and framed in a small inexpensive frame to make a pin tray, as shown in the lower center of the illustration.

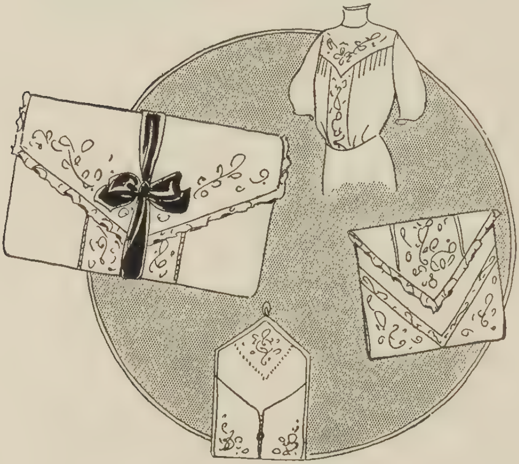


FIG. 24

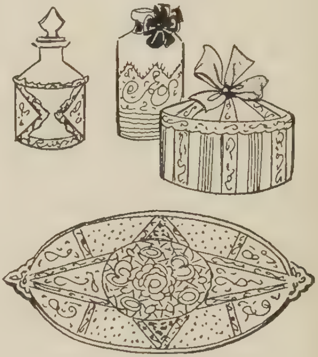


FIG. 25

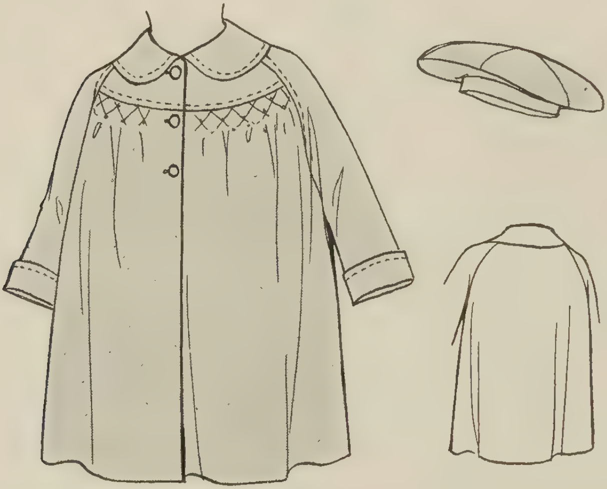


FIG. 26

POSSIBILITIES IN WORN SKIRTS

56. Changing the Style.—If it is desirable to make a few necessary changes and retain the separate skirt as a skirt rather than cut it over, some of the suggestions offered in Arts. **22**, **42**, and **43** will be found applicable. In addition to these, there are other means of correcting defects in separate skirts. If the skirt is too tight through the hips, lift it on the belt to give sufficient ease, and then, if necessary, apply a false hem or a band at the bottom for additional length. A skirt that is too short may be dropped on a camisole or a yoke, and worn with a long overblouse to cover the joining.

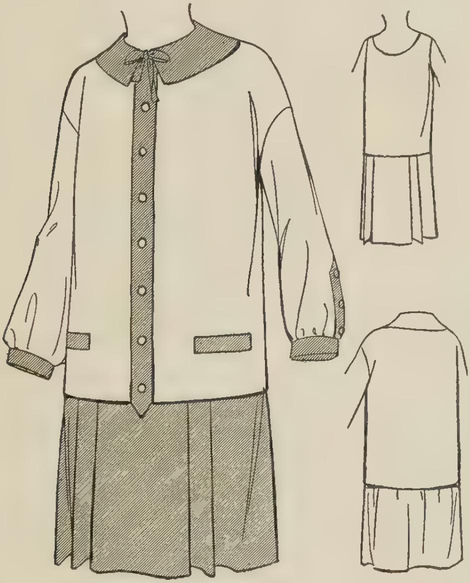


Fig. 27

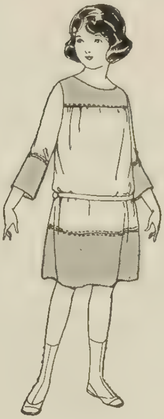


Fig. 28

57. Cutting Down Skirts.—A skirt that is worn may be cut down to make one of many attractive garments for a child. Fig. 26 shows a coat and a tam that may be cut for a small child from a white corduroy or a light flannel skirt.

Other garments that may be cut for children from worn skirts of suitable fabric are dresses, bloomers, and knickers, for little girls, and trousers for boys. Fig. 27 shows a dress that utilizes the good parts of two skirts, a separate blouse being made from one, and a skirt and trimmings from the other. The plaits in the skirt give opportunity for invisible piecing, if this is necessary. The skirt, being separate, may be worn with middy blouses.

Fig. 28 shows a child's dress made from two skirts—one serge, and the other satin. If the serge is shiny from wear, it may be turned, provided it is attractive on the wrong side.

58. Using Full, Plaited Skirts.—A very full, plaited skirt often provides enough material for a whole dress for an adult after it is ripped, cleaned, and pressed. Or, the plaiting may be retained, and a blouse of harmonizing color may be attached, thus producing a dress.

RECUTTING WORN COATS

59. Cutting Down Coats.—Heavy coats are restricted to a narrow field of usefulness by their very weight. The material is too heavy to be comfortable as anything but a coat. So a lady's heavy coat logically becomes a little girl's coat, and a man's overcoat just as logically evolves into an overcoat for a small boy.

The coat shown in Fig. 29 is a good type for a child's coat, which may be cut from a larger coat of material that is not too heavy. Twilled weaves and broadcloth are especially well adapted to such a coat.

A heavy coat may be made into a storm cape for a schoolgirl to wear in winter over lighter-weight wraps.

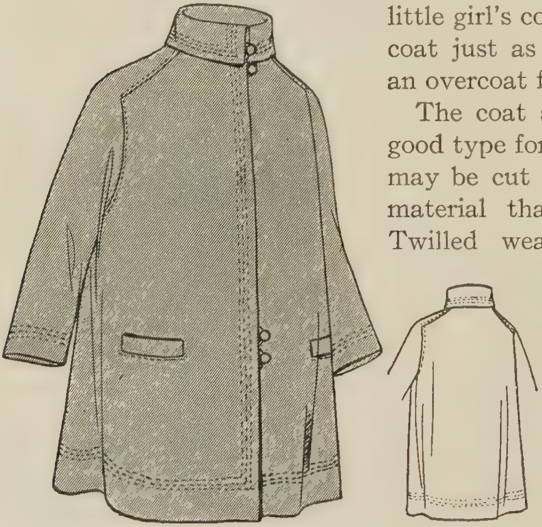


Fig. 29

Light-weight coats may be made into skirts for young girls, dresses for little girls, or even into boys' suits.

60. Making Over Coats.—There are, of course, some changes possible that will vary the appearance of a coat so that it can be worn again by its owner. Each is an individual problem, and invariably the cut of the coat in question, together with the lines of the current silhouette, suggest the possible change.

Fig. 30 shows a method of handling the problem of the outgrown coat. The figure at the left shows the one-time, full-length and becoming sports coat that has become too short in the skirt and the sleeves for its young owner. The figure at the right shows the same coat, again made wearable and attractive by shortening the skirt part to a becoming short-coat length, and using the material cut off for piecing down the sleeves and adding short cuffs to them.

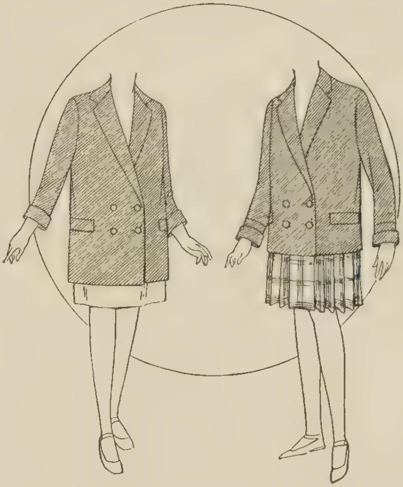


FIG. 30

61. Artistic Patching of Coat Linings.—It often occurs that a coat is in good style and very good condition except that its lining is worn along the lower edge of the sleeves and around the bottom. Obviously, it would be extravagant to replace the entire lining with a new one. The problem of replacing the worn section without having it look "patchy" also presents difficulties. It is a happy thought, then, that leads one to the ribbon counter to solve the difficulty. Here is the way it may be done.

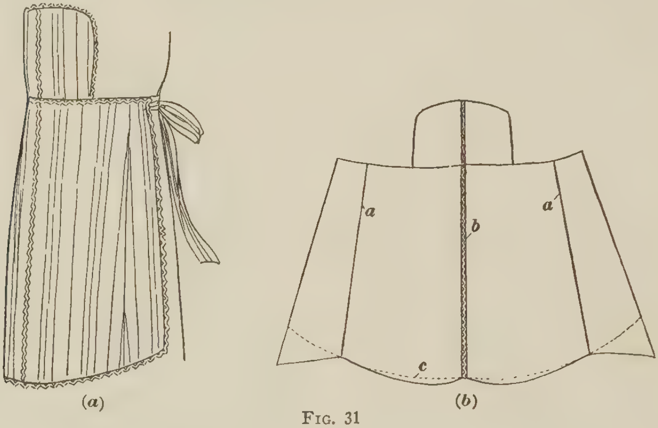
Cut off the worn edge of the lining and select ribbon ½ to 1 inch wider than the piece cut off, and of a color, or colors, that blend with that of the lining. Now, 3 to 5 inches above the cut edge of the lining, slash it across and insert the ribbon. This brings a band of the lining material at the bottom, and the ribbon pieces out the necessary length, at the same time adding a touch of distinction to the lining.

When a coat lining becomes worn under the arms, instead of patching it, apply dress-shield shaped pieces of the lining material. These are double and may be interlined with muslin to give them body.

USING MEN'S WORN SHIRTS

62. Making Aprons.—Worn shirts have supplied the wives, mothers, sisters, and daughters of their ex-owners with aprons for so many years that no one knows whom to credit with the origin of the idea. But, although the idea is very old, new adaptations of it appear from time to time. For example, it has been proved that two aprons may be cut from one shirt, and both be large enough for a woman of average size. The accompanying figures show how this is possible.

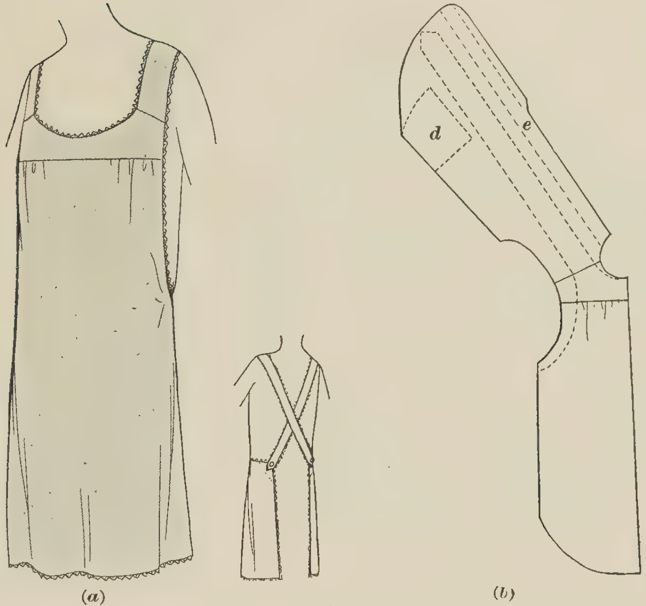
63. Fig. 31 (*a*) shows an apron that is made from a pair of shirt sleeves, and the accompanying diagram (*b*) shows how it is done. Simply cut the sleeves open from the cuff openings instead of along the seams. The sleeve seams are indicated by *a* on the diagram. Join the two sleeves lengthwise with rickrack braid, as at *b*, and shape the lower edge as indicated by the dotted line *c*. Edge the apron with rickrack. If a bib is desired, cut it from a part of the shirt front that will not be used for another apron, as indicated by *d*, Fig. 32 (*b*) and 33 (*b*). The bib also is put together and joined to the waist line with rickrack. Strings for this apron may be cut from the shirt fronts, also, as shown at *e*, in Figs. 32 (*b*) and 33 (*b*).



(*a*) (*b*)

FIG. 31

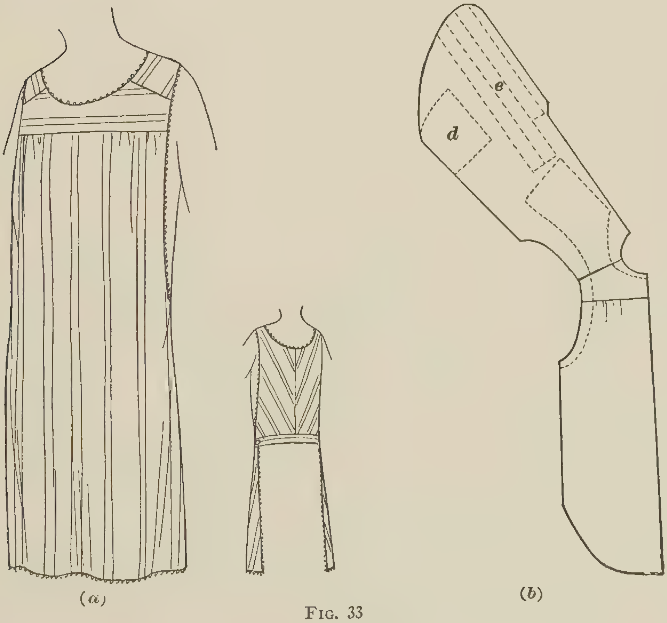
64. Fig. 32 (*a*) shows a cover-all apron made from the rest of the shirt. The diagram (*b*) shows the shirt cut open on the under-



(a)

(b)

Fig. 32



(a)

(b)

Fig. 33

arm seam, with sleeves and neck band removed. As indicated by the dotted lines, the apron front is cut from the shirt back, and the back yoke of the shirt becomes the front yoke of the apron without the ripping of a single stitch. The straps, cut from the front, are already attached, and the only sewing necessary is to finish the outer edges with rickrack or novelty braid.

Fig. 33 (*a*) shows another apron, identical with Fig. 32 (*a*) except for the back. The diagram (*b*) shows the cutting. In this case, there is one seam at the center back.

65. Miscellaneous Uses.—Other uses for worn shirts are for a child's rompers, apron, or dress, and for a boy's shirt. In cutting down a shirt for a little boy, place the pattern on the shirt so that the original hems at the front, with their buttons and buttonholes, may be used for the front of the boy's shirt.

A worn silk shirt supplies material for a pleasing chemise by cutting the chemise front from the shirt back and the back from the shirt fronts. A seam at the center back gives an opportunity for slight fitting and an inverted plait, if desired. The top may be bound with self-material cut from the sleeves. Also, step-ins may be made from the lower part of a silk shirt by replacing the plait with a French seam and using this at the front. A 3×7 crotch piece may be cut from the sleeves. The top should be finished with a casing and the lower edges may be left plain or finished with lace or blanket-stitching. Some striped silk shirts make attractive sports blouses for young girls or dresses for children.

UTILIZING HOUSEHOLD ARTICLES

66. The thrifty housewife does not stop with the remodeling of garments. Her enthusiasm carries her over into the realm of household articles, and she finds that there are many things, often thrown away, that will give additional service if a little ingenuity is used.

67. Table Linen.—Linen table-cloths break and show wear on the lines where the folds come or where the cloths touch the table edges, while the remainder of the cloth is still very strong. From them, one may cut lunch napkins, table runners, individual mats, tray cloths, dresser scarfs, and face towels. Lovely, soft wash cloths for the baby may be cut from small pieces. The edges of some of these articles may be hemmed by hand or machine, or, as in the case of tray cloths, they may be machine hemstitched, and a picot edge crocheted in the hemstitching. Cross-stitched edges will be found decorative for dresser scarfs, table runners, or individual mats.

Fig. 34 shows a luncheon set made from small pieces of linen. To increase the size of the lunch cloth, hems were applied with machine hemstitching, and, although the napkins and individual mats required only very small pieces, they were treated in the same way to harmonize. Fagoting may be used in the same way, or the pieces may be joined with feather braid, which gives an effect that is similar to hemstitching.

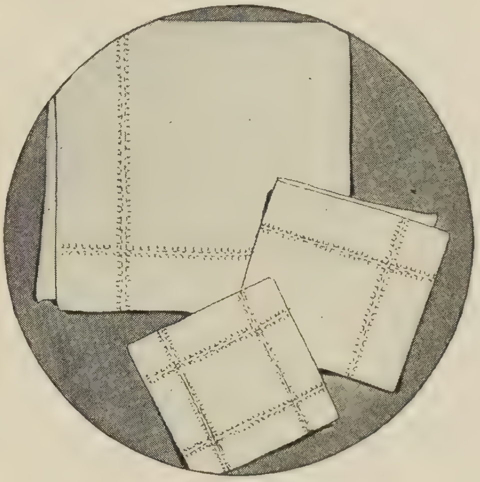


FIG. 34

The set in Fig. 35 has its edges finished with simple crochet. A machine-made lace may be substituted, if preferred.

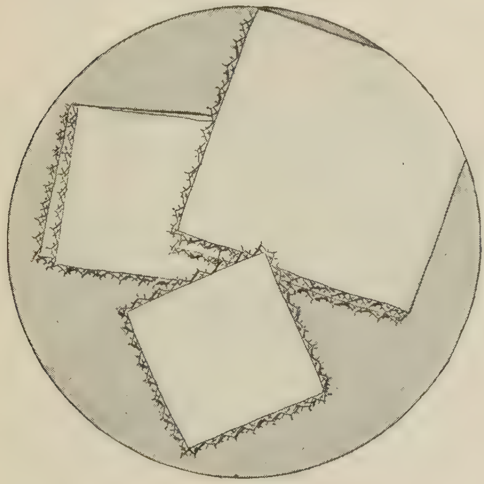


FIG. 35

68. Towels.—The good parts of worn Turkish towels may be cut into squares and hemmed for use as face cloths. Bibs for small children may also be made from Turkish toweling, and, when bound with a dainty color, they are most attractive. Linen towels may be used in the same ways as Turkish towels, and, in some cases, for small doilies finished as suggested for those of table linen.

69. Bed Linen.—Worn pillow slips may be cut down for use on smaller pillows. Soft old bed spreads may be cut up for hand towels or face cloths. The worn edges of blankets may be cut off and silk blanket binding, 2 or 3 inches in width, may be stitched on. Another method of finishing blanket edges is to crochet a shell edging, using a steel crocket hook. If the blanket is worn through the center as well as along the edges, it may be cut into squares about 1 yard square, which may be used to wrap around the baby when he is taken from his bath. Or, if there is no baby in the house, put two of these thin blankets together, cover them with pretty silkaline or similar material, tie them with wool yarn, and you have a warm and attractive comfortable that will be very serviceable. It may be laundered easily, since the blankets do not "bunch" in washing as the cotton filling, generally used in comfortables, is likely to do.

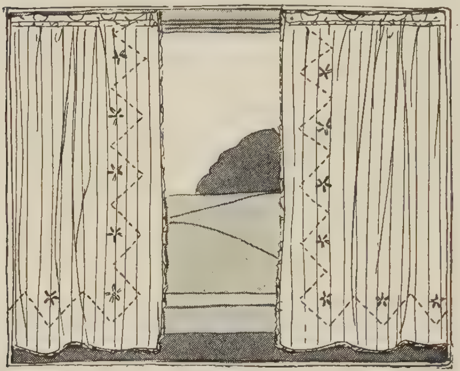


FIG. 36

70. Curtains.—Full-length curtains of Swiss, net, scrim, or dimity may be cut down for sash curtains when their edges become worn. A little design in simple darning-stitches, such as shown in Fig. 36, makes them look almost like new.

USING OUT-OF-SEASON CLOTHES FOR HOUSEHOLD ARTICLES

71. Every now and then something—a dress, a scarf, a blouse—goes out of style or meets with an accident, so that it can no longer be worn. Some of the material is good, but it is in pieces of sizes or shapes that make them valueless as possibilities for remaking into other garments. Before you discard them completely, look them over with an eye to their possibilities as sofa pillows, table runners, or lamp shades. Often, too, when the garment can be made over, there are pieces left that might well be used in one of these ways.

72. Making Pillows and Runners.—A kerchief scarf came into close contact with the ink bottle, and a big ugly stain in the center left it useless as a scarf. The corners, however, were unharmed, so they were cut off and used to make the square pillow in Fig. 37.

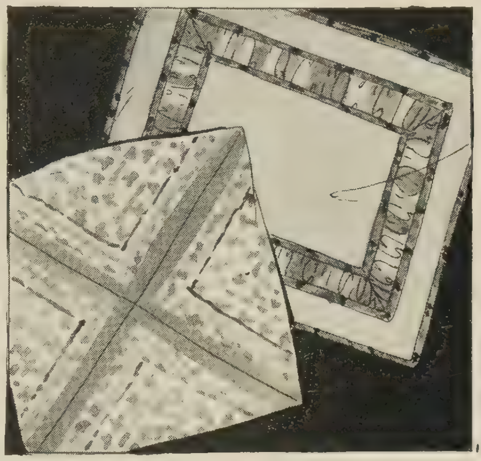


Fig. 37

A piece of light-brown taffeta from a dress made the foundation of the oblong pillow, and to brighten it up, small gay-colored silk scraps were cut in pieces 3 inches wide and of various lengths. These were sewed together with plain seams, gathered on both sides to form puffing, and applied to the pillow with novelty ribbon. Scraps of velvet of various colors may be used for a similar trimming on a velvet floor cushion. In this case, however, it is better not to gather the varicolored band but rather to insert it flat.

Fig. 38 illustrates a number of types of pillows, many of which may be made from cast-off apparel of suitable material and color.

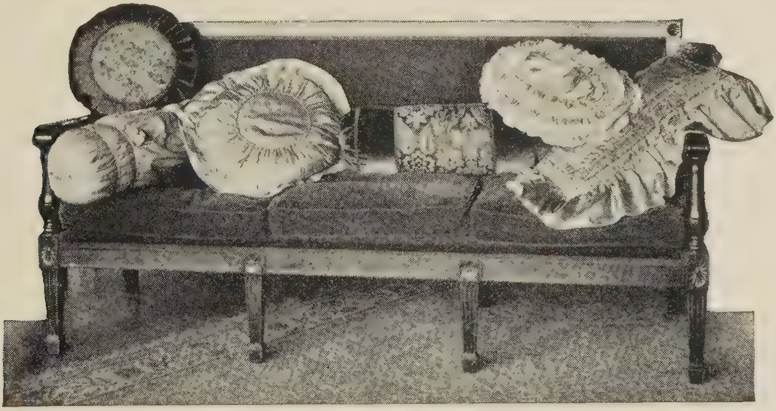
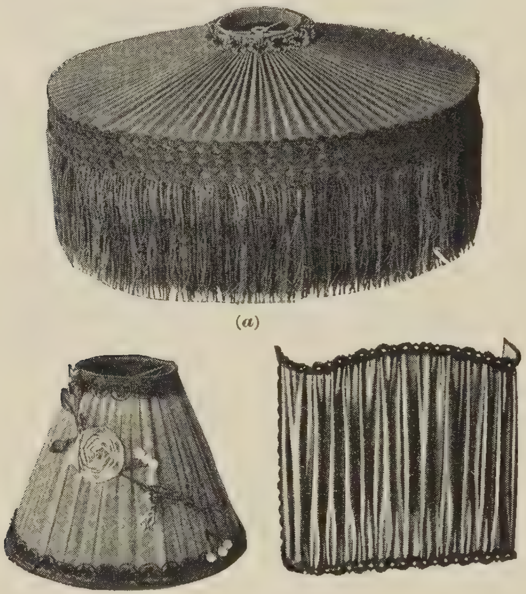


Fig. 38

An old velvet suit that is cut in small pieces so that it offers very limited possibilities for remodeling may be transformed, with the aid of a little metal brocade and metallic braid, into a table runner and some cushions to match it.

73. Lamp Shades.—If you wish to make a lamp shade from parts of an old dress, consider the weight of the material first. Georgette, chiffon, and crêpe de Chine are light enough in weight to permit the light to filter through. Veiling a flowered silk with chiffon or Georgette gives attractive results if both are chosen so that their colors combine attractively over the light. Fig. 39 (*a*) shows a shade suitable in size and shape for a living room. The small flower-trimmed shade (*b*) and the light shield (*c*) are appropriate for use in a bedroom. Any ten-cent store will supply the wire frames, and most of them also sell fringe and braid for finishing the edges. Or, it may be that you have some fringe from a dress or braid from some other article that can be used. Flower trimming is easily made from scraps of ribbon or silk.


(*a*)

(*b*) FIG. 39 (*c*)

UTILIZING REMNANTS AND MISCELLANEOUS MATERIALS

74. Laces.—Lace, whether real, hand-made lace or merely a machine copy, can always be used to advantage. Wide lace is lovely for evening and dinner dresses. If only a small part of the lace from a lace dress is good, it may be used as sleeves, collar, apron, vest, sleevelets, or inserts on a new or a made-over dress. Fig. 40

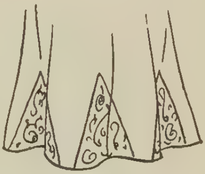


FIG. 40

shows how lace may be used for godets in a dress or slip. Odd pieces of narrow lace may be combined to make attractive collars, such as those shown in Fig. 41. Jabots, vests, and plastrons,

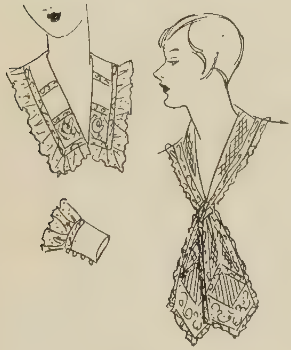


Fig. 41

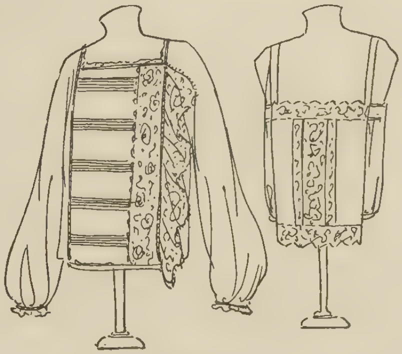


Fig. 42

as in Figs. 42 and 43, are other uses for small pieces of lace in dress decoration. Then it is always possible to use them as inserts in underwear.

With a little ingenuity, fragments of coarse lace may be joined in pleasing arrangements or inserted in linen to make small mats, such

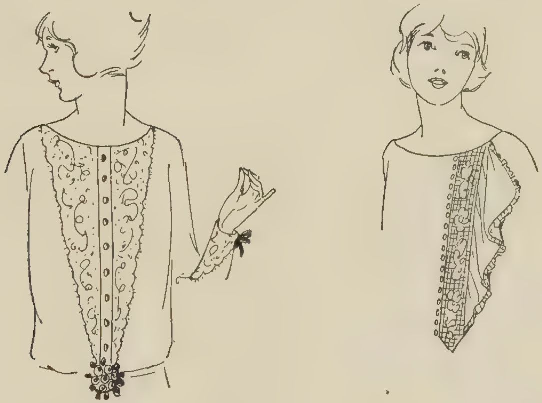


Fig. 43

as are shown in Fig. 44, for cases, candlesticks, or similar purposes. Sheer silk lace of medium width may be sewed to a tiny square of colored chiffon to make a handkerchief that gives a decorative note to a costume.

75. Ribbons.—Ribbons, even in very short lengths, may be made into lovely little flowers and buds for decorating undergarments, negligées, party dresses, and children's clothes. Fig. 45 shows several varieties. Detachable shoulder straps made of ribbon are lovely decorated in this way. Sachets may be made of ribbon or of scraps of silk and bound with ribbon. Several tied together, make a dainty trifle for personal use or a small gift. Single sachets are lovely when trimmed with ribbon or silk flowers.

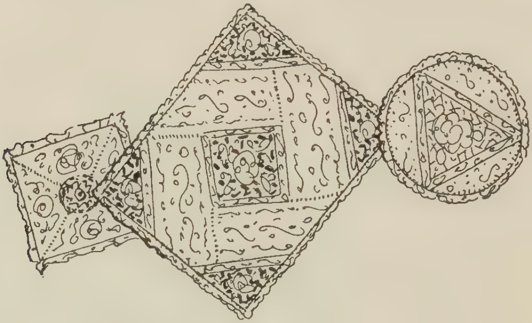


Fig. 44

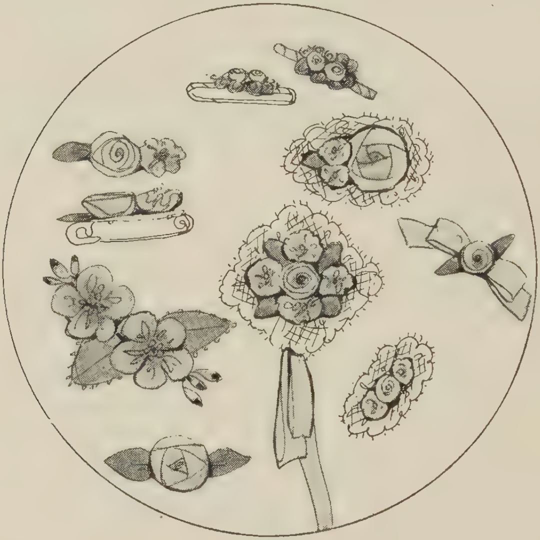


Fig. 45

THE UPKEEP OF CLOTHING

VALUE AND SCOPE

1. The resolve to purchase only good materials and well-made garments is not ample insurance that the individual or family wardrobe will be above reproach in appearance at all times. These are invaluable aids, of course, but even the best and most expensive materials are capable of looking downright shabby in a surprisingly short time if they do not receive proper care—the care to which all clothing, as the immediate background and setting for a personality, is entitled.

So let us incorporate into our resolution to buy good materials, a clause to the effect that we will also give our clothes proper care, in order that their term of service may be lengthened, that their appearance may be improved, and that our enjoyment in wearing them may be increased.

2. Proper care of clothing has several phases. It can mean the constant care that varies according to the nature of different articles, or it can mean the spasmodic bursts of attention that a change of season brings.

A semiannual, complete renovation of the wardrobe is important and necessary, and yet insufficient. Clothes develop little ills from daily wear, which must have immediate attention or their condition will become chronic, or worse still, incurable. And then, too, there are acts of prevention, which, if not left undone, will help clothing retain its newness for a long time. Such items as *hanging*, *brushing*, and *airing*, as well as *pressing* and *mending*, fall under the head of caring for the clothing that is in daily use.

In addition, there is the matter of *storing*, which, when considered in relation to some materials and articles, demands thought and timely action to keep garments from becoming yellowed, faded, dusty, stretched, or moth-eaten.

3. How to keep clothing in the best possible condition, whether it is in use or in storage, is the theme of this chapter. The directions that follow are more than helpful hints; they are sufficiently detailed so that no doubts should arise in their use and no unsatisfactory results be incurred.

CARE OF CLOTHING IN DAILY USE

HANGING CLOTHES

4. Need for Hanging Clothes.—The majority of garments, whether wool, silk, or cotton, should be hung on hangers, a separate hanger for each garment, if possible. Hanging coats and dresses on nails or hooks by the collars or sleeves often causes them to become so badly misshapen that the most painstaking pressing is required to restore the original lines of the garment. Frequently a trip to the tailor is necessary if the garment has been allowed to hang for a long time.

5. Hanging Special Gowns.—A party dress, or any light-weight gown or delicate blouse, should, if possible, be hung on a hanger with a silkaline or other light-weight slip over it, rather than be folded away in a drawer or chest, as it retains its shape much better and does not become so wrinkled. Very fragile evening dresses should be held up on the hangers by means of tissue paper or padding, loosely arranged on the hangers, to save them from pulling down and giving evidence of the hanger when worn. Also, if the dress is of silver or gold cloth or trimmed with these materials, the cover enclosing it should be black to prevent tarnishing.

6. Clothes Hangers.—It is just as easy and not a cent more expensive to have an attractive row of clothes in one's closet as it is to have an untidy arrangement of garments on a motley array of hangers. For a small sum, neat, smoothly enameled wooden hangers can be bought in white or pastel colors at ten-cent stores, or unpainted wooden ones may be procured and then covered with ribbon or silk in a variety of ways.

7. Skirts may be hung on trousers hangers, or by loops attached to the skirt belt. If no better method is available, pin safety pins through the belt and hang the pins over nails or hooks the proper distance apart, or attach a small ring to each safety pin and hang the rings over hooks in the closet.

A skirt hanger that can be purchased consists of two clothes-pin clamps attached to a wire frame, which is supplied with a large hook or ring that can be slipped over a hook or nail. Another purchasable kind of skirt hanger that is used considerably is made of wood or wire. It is similar to the hanger used by men for hanging up their trousers, being arranged so that it may be slipped over the belt or the band of the skirt, clamped in position, and then hung over a hook or a nail. A hanger of this type supports the skirt perhaps better than any other kind.

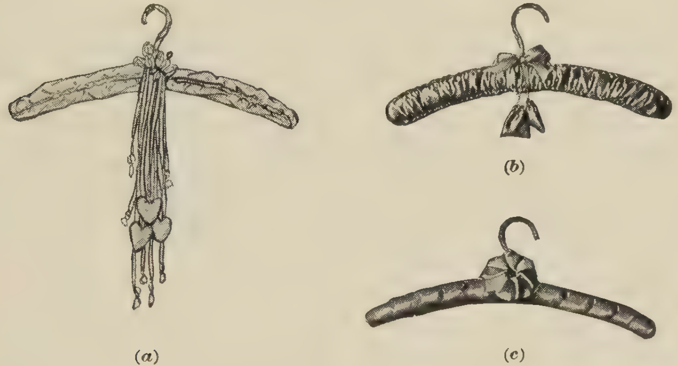

(a) (b) (c)

FIG. 1

8. **Making Clothes Hangers.**—If a broad hanger is desired for garments that might become marked or stretched, wire or unpainted wood hangers may be padded and covered.

Any one of the coat hangers in Fig. 1 is dainty enough for the most special garment. Those in (*a*) and (*b*) are made in practically the same way except that a wire one is used for (*a*) and a wooden one for (*b*), and the shirred seams come at different places. The frame is first padded with cotton, and then covered with 1½-inch ribbon. The hook is wound with narrow ribbon, which is tied into bows or made into a rosette. Little sachets are then attached to long ends of the ribbon.

The hanger in (*c*) was padded and then wrapped first with 1-inch ribbon of one color, and then with 1-inch ribbon of another color.

Catch-stitching along the top where the ribbons cross holds them in place. The rosette is a tailored one.

9. To make tape hangers for skirts, turn the edges of a narrow strip of the facing material and stitch these edges together, or stitch together the edges of seam binding or tape. Then cut the material so that each strip for the hanger will be about 2½ inches long, and secure them in position by overhanding the ends of each closely at the bottom of the band or the belt, placing them straight along the edge of the band or the belt. By securing the strips to the garment in this manner, there will be no possibility of the hanger material showing above the belt or the band when the skirt is worn.

The safety-pin style of hanger is made by covering up small metal rings with crocheting or twisted ribbon and then attaching a medium-sized safety pin to each one. To use such hangers, pin the safety pins in the belt of the skirt and slip the rings over properly spaced hooks in the closet or wardrobe.

10. Training Children in Clothes Responsibility.—Children should be taught to take pride in caring for their own clothing. Even small children can hang their garments on low-placed hooks, and they will take great delight in the charming children's hangers on the market. Many of these have painted childish faces, which render them quite irresistible.

Plenty of closet or wardrobe space for dresses, with provision for shoes, hat boxes, and the like, makes the daily care of clothing much easier. Once the young members of the family have acquired the habit of putting garments away promptly, the care of the family clothing is appreciably simplified.

11. Brushing Clothes.—Coats, suits, cloth dresses, and skirts should be brushed carefully and frequently, after each wearing, if possible. A whisk-broom or a brush with short, stiff bristles is well suited to such use. Brush with the nap on napped materials. Turn back the edges of tucks, turn pockets wrong side out, and carefully expose the edges of seams in order to remove all accumulated dust and lint underneath. After brushing, shake well to remove lint and bits of dirt.

In the case of silk clothing, use a piece of silk or velvet or a very soft brush. A harsh brush might break or injure the threads.

12. Airing Clothes.—Air garments frequently and, if possible, store them in a closet where the air circulates freely, as partly soiled garments become discolored if kept in an unaired place. Leaving the closet door open at night is helpful.

The most thorough airing is given to garments when they are hung out-of-doors where air has free circulation. When this is done, pin each garment fast on its hanger so that no sudden breeze can carry it off the hanger. Also, be sure to fasten the hangers to the clothes-line with spring clothes-pins clamped so firmly that there is no danger of their allowing the hangers to slip and discharge their burden on the ground.

13. For those who live in an apartment where it is not always convenient or even possible to hang clothes out-of-doors to air, the following suggestions will prove helpful. Purchase a small towel rack that opens out like a fan. Fasten this to a window frame, high enough from the floor so that a dress may be hung on it without touching the floor. To hang a dress on this so that it has the greatest possible exposure to the air from the open window, slip one of the arms of the rack through each sleeve. If the dress is much wrinkled, brush it vigorously with a dampened whisk-broom before hanging on the rack. Let it hang in this way over night, and by morning it will be fresh and usually free from wrinkles.

WOOLEN GARMENTS

14. Pressing and Steaming.—Press woolen garments frequently, following the directions in Art. **164,** *Home Laundering*. Use a woolen press cloth, as this leaves no shiny marks. Directions for removing shine due to wear are given in Arts. **80, 81,** and **132,** *Dry Cleaning*. And the bathtub method of steaming, as described in Art. **82,** *Dry Cleaning*, should be resorted to in time of need.

It is very often possible to shrink away bagginess at the knees of trousers and the elbows of coats and dresses by spreading the garment out flat on the board, covering the baggy portion with a well-dampened press cloth, and pressing until the press cloth is quite dry. More detailed instruction concerning the pressing of special woolen articles is given in Arts. **135** to **144,** inclusive, *Dry Cleaning*.

15. Cleaning.—Remove spots from woolen garments as soon as possible to prevent them from becoming too deeply set. Grease spots, particularly, collect dust, which makes the spots difficult to remove.

Cloth dresses should have a lining, especially in the waist portion to protect the material from being soiled by body oils. Dress shields also are a protection. Both shields and linings should be removed frequently and washed.

Using removable, washable collars and cuffs greatly reduces the need for cleaning cloth dresses. Woolen garments must, however, be thoroughly cleaned as often as needed, both to improve their appearance and to render them hygienic. The methods described in Chapter II will be found applicable to any type of garment. If preferred, of course, the services of a professional cleaner may be employed.

16. Most people are so constituted that they are much more likely to attend to cleaning duties if the necessary soap flakes and bluing are at hand, on a convenient shelf in the bathroom, perhaps. Or, a small spot on a dress or coat stands a better chance of receiving due attention if this same bathroom shelf provides also a bottle of non-explosive solvent, such as carbon tetrachloride, an absorbent, such as magnesia, a little ammonia, borax, a small sponge, and possibly some other cleaning necessities.

17. Repairing Garments.—Watch all garments closely for loose buttons, snaps, hooks and eyes, trimmings, etc., as well as for ripped seams in garment or lining, and frayed edges on skirts or sleeves. When edges or folds become worn, the hems may be ripped, the worn places darned, and new hems turned slightly deeper to conceal the darning. Thin places, particularly at the elbows of coats and dresses, or the knees of boys' or men's trousers may be repaired and reinforced by putting a piece of the same or similar material underneath and darning it with ravelings of the material. With the aid of mending tissue, one may often mend a tear in a wool garment so that it is quite invisible. This is not so durable as darning, however, and is to be used only where darning could not be concealed.

18. Sweaters and Other Knitted Garments.—Garments of the knitted variety should not be hung on hangers even for a short time, as their weight causes them to stretch badly, and, unless the hangers are very well padded, the garments retain bumps caused by contact with the ends of the hangers. If hung at all, they should be slipped through small hoops which are padded and covered for the purpose. Such hoops may be purchased in various sizes in novelty shops, or they may be padded and covered at home. At the top of each hoop, a ribbon may be tied or sewed so as to form a loop by which to hang the hoop on a hook. More satisfactory still than the use of hoops is to air knitted garments well by folding them once over a clothesline, and then to lay them flat in a box or a drawer.

19. Little rips or tears in knitted or crocheted garments must be mended quickly before they have an opportunity to run. Use fine thread of the color of the garment in mending small breaks in such garments. Each loop of the mesh around the tear must be caught or it will run, and every thread must be secured firmly, from the wrong side, wherever possible. A tear may often be temporarily prevented from developing runs by wetting the material around it until there is opportunity for mending it.

Thread of the same weight, color, and texture as that of the garment must be used for mending a large tear. Darning may be done so that it is quite inconspicuous, but for a large hole in a position where it is quite exposed, knit or crochet a patch the size and shape of the hole and darn it to the hole from the wrong side.

SILK CLOTHING

20. Cleaning and Pressing.—Silk garments, like wool, should have all spots removed promptly. Very often sponging with a soft cloth dampened in cold water will remove a freshly made spot which would not yield to more severe treatment once it was allowed to become set. After sponging, press on the wrong side with a warm iron. When necessary, dry clean silk garments, or wash them if they are of washable silks.

Unlike wool, silk should be pressed as little as possible, because heat weakens the delicate fibers. Always press it on the wrong side and preferably under a press cloth. Use a *warm*, not a hot, iron. Very often pressing may be avoided and wrinkles removed by steaming. If so, one of the methods in Arts. 80 to 84, *Dry Cleaning*, may be chosen.

Like wool dresses, silk ones should be protected from body oils by means of linings, and from perspiration by dress shields. The use of dress shields is particularly important because perspiration causes silk fibers to disintegrate.

COTTON AND LINEN CLOTHING

21. Shaking, Airing, and Cleaning.—Brushing cotton or linen clothing tends to rub the dirt into the fibers. Shaking is much more effective. All garments of cotton or linen, particularly those next to the skin, should be carefully aired and frequently washed to render them hygienic. Cleanliness lengthens the service of garments. Do not let them become so soiled that hard rubbing is necessary, as that wears out the material. Also, do not let clothes flap in the wind overmuch, as such whipping takes the life out of them.

22. Pressing.—The pressing of soiled cotton or linen clothing presses the dirt in and tends to cause the material to turn yellow. When it is necessary, however, that such clothing be pressed, dampen the material evenly and take precautions to have the iron perfectly clean in order to prevent rust or other stains.

23. Repairing Cotton and Linen Clothing.—A great deal of the time spent in repairing cotton garments, particularly underwear, may be saved if the parts that are subject to hard wear are reinforced in the making. Or, a patch stitched over the cross-section of seams inside pants or bloomers to stay them is advisable. Another preventative measure is to remove all fluffiness from old clothes that children are to wear out as play togs. Also, on garments for children, sew buttons through several thicknesses of material to prevent them from tearing out. In case a button is torn off, hem a narrow cotton or linen tape to each side of the material over the tear, and sew the button to this. Sew up torn buttonholes or rework them when necessary. Taking care during the wringing to turn buttons and fasteners in will save buttons from breaking or pulling out and fasteners from being bent.

24. Washing and ironing stretch holes and make them larger. So, whenever it is possible to do so, mend them before laundering. This is especially true of laces and knitted fabrics, which must be watched carefully and have all breaks or tears repaired immediately.

If fine thread is used, small holes in cotton or linen garments may be darned quite invisibly. Patching will be required for the larger holes. This subject is considered in detail in the volume called *Home Sewing*.

If a hole is discovered when time is not available for applying a patch, the hole may be repaired temporarily by dipping a small piece of the material in cold starch, placing this neatly over the hole on the wrong side, smoothing out the edges of the hole and the patch carefully, and pressing it with a hot iron. The heat cooks the starch and the patch will adhere until the garment is washed.

HOSIERY

25. Putting on Hosiery.—There is a right and a wrong way to put on your stockings; and the service they give you depends largely on whether or not you observe the rules. The leg of the stocking should be rolled down, the foot slipped into the stocking, and the stocking rolled carefully over the heel so that there is no unnecessary strain on the fibers. Then the stocking leg should be drawn up snugly but not too tightly. Never thrust the foot into the stocking and pull it on by tugging at the top of it. Such treatment is bound to break threads sooner or later.

If the foot is damp, a little talcum on the foot will make the stocking slip on easily.

26. Wearing Stockings.—Holes or runs are often caused by finger rings, shoe buckles, or sharp nails catching in the delicate fibers, or by slippers or pumps rubbing up and down at the back. To make slippers fit snug around the back, heel pads may be purchased at shoe stores or a strip of velvet may be pasted around the inside of the heel. Keeping the nails cut short also will prevent puncturing the toes of stockings.

Wearing too small a size of stocking or fastening hose supporters too tight are sure means of shortening the life of stockings, as the strain on them is then too great, especially when the knee is bent. Hose should, therefore, be the right size and supporters should be fastened cautiously in the double tops at the sides rather than at the front.

27. Washing.—Wash new silk hose before wearing them. This removes the dressing, which sometimes contains so high a percentage of metallic salts that it cuts the delicate fibers of the silk if allowed to remain in the hose even during one wearing.

Wash all hose after each wearing, as perspiration rots the fibers, particularly of silk hose. Wool fibers become matted quickly and wear out very rapidly unless washed regularly. In Art. **157,** *Home Laundering*, detailed instruction for washing hose is given.

28. Mending.—The old familiar maxim of a "stitch in time" seems always to be particularly apt in relation to hosiery; for, if all holes and rips are not mended as soon as they appear, the runs that immediately follow destroy the stocking so completely that neither nine stitches, nor any multiple of nine, can greatly prolong its usefulness. Instruction for darning holes and repairing runs is given in Volume I.

To stop a run until you have time to mend it, rub a piece of soap across the end of it.

Stockings, particularly for children, may be made to wear longer by "preventive" darning; that is, running a few stitches in the heels of new stockings, having the stitches long inside and *very* short on the outside of the stocking. Darn any thin spots as they appear before they break through to form actual holes.

GLOVES

29. Putting on and Removing Gloves.—Put on gloves carefully, particularly if they are kid gloves, which are prone to stick to the hands. Work each finger on separately. Be equally careful in removing them from the hands. Do not pull them off hastily; instead, work them off, each finger separately, finally drawing the hand out carefully. Then inflate the fingers by blowing in them, and pull them into shape before putting the gloves away. Fold the thumbs over onto the gloves, and always put gloves away in pairs. Long, narrow boxes are excellent for keeping them in good condition.

30. Cleaning and Repair.—Kid gloves may be kept clean by the dry-cleaning method suggested in Art. **92,** *Dry Cleaning*. Directions are given in Arts. **93, 94,** and **95** for cleaning chamois, doeskin, buckskin, and washable kid. White kids soil easily, but, since they clean better than light-colored ones, they are really more satisfactory in the end. Cotton and silk gloves are easily washed, as explained in Art. **159,** *Home Laundering*. They wear very well when worn spots are attended to immediately. They may be darned with soft, fine thread. If snappers pull out, they may be replaced by ordinary snap fasteners.

All gloves should be kept in good repair. As soon as a seam rips, sew it up, using cotton rather than silk thread, particularly on kid gloves, because silk thread is likely to tear the leather. In sewing up rips, use stitches that match the original ones. Detailed instruction for mending tears in kid gloves is given in Volume I.

HATS

31. Brushing and Protecting from Dust.—Brush hats carefully after each wearing, not only on the brim, but down in the folds as well. For this, a soft brush specially made for the purpose may be used, or for silk or velvet hats, a piece of velvet is excellent. A cloth dipped in alcohol may be used to remove the dust from straw hats. More detailed directions for several cleaning processes are given in Arts. **97** to **102,** inclusive, *Dry Cleaning*.

Hats not constantly in use should be kept in boxes away from the dust. Tissue paper over the top of the hat is a further precaution which may be taken. If the brim is in danger of being marred or misshapen from lying in a box, a hat stand of the commercial type or one made at home by rolling stiff paper, about 9 or 10 inches wide, into a roll that is larger at one end, should be put in the box and the hat placed on this.

32. Making Hat Boxes.—The putting away of hats may be somewhat of a pleasurable task if attractive hat boxes are employed. These may be made at home easily by covering sufficiently staunch cardboard boxes of the right shape and size with cretonne, chintz, or wall-paper. Paste is used to apply the wall-paper and to secure the edges of the cretonne or chintz. Or, the entire jacket of cloth may be pasted fast; but care must be taken not to use a superfluous amount that will go through the fabric and make ugly spots.

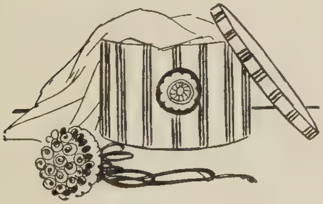


Fig. 2

One attractive type of cardboard hat box is shown in Fig. 2.

33. Remedial Measures.—Loosened trimmings should be tightened immediately or taken off and put on again. Very often the hat may be made to look quite new by taking off the trimming, freshening it by steaming and brushing and a little color retouching, and then replacing it. Even mussed and faded artificial flowers may be made to look as good as new by cleaning, steaming, and tinting.

A hat of velvet or silk that has become wet in a shower should be dried over a radiator or stove, care being taken to keep it from touching anything.

If a hat has been very wet and has dried out of shape, it may, in many cases, be greatly improved by steaming over a teakettle spout, or over a wet cloth on a hot iron, according to the processes explained in Arts. **80** and **81,** *Dry Cleaning.* While the hat is still damp from the steaming, the shape can sometimes be restored.

Hats often become very soiled at the back from rubbing against coat collars. To overcome this unseemly condition, use a spotting reagent that will remove both soil and grease and apply one of the cleaning methods described in Arts. **98** to **103,** Chapter II. Frequent treatments will be necessary to keep light-colored hats clean and fresh-appearing.

Sometimes it is advisable to take a fabric hat apart, supply a new buckram frame the shape of the old one, freshen all materials by steaming and pressing, and then completely reassemble the hat.

SHOES AND RUBBERS

34. Preserving the Shape of Shoes.—Buy good shoes and have them properly fitted. Shoes of poor quality are never an economy, as they lose their shape so quickly that they give very limited satisfaction.

Shoes that are "run down at the heel" present a slovenly apearance, which is anything but flattering to the wearer. To prevent this, take great care in walking to preserve proper poise, which tends to keep the soles and heels level. In case heels do become run over, have them repaired immediately. To wear them without repairing spoils the shape of the whole shoe. Rubber heels wear well and help to prevent fatigue when one must be on one's feet for long periods. They also relieve some of the jar in walking.

35. Another method that is effective in retaining the original shape of shoes is to keep them on shoe-trees or stuffed with tissue paper when not in use.

For the shoe-trees in Fig. 3, bronze ribbon and a bit of gilt paint were used. Two pieces of ribbon a little longer than the tree are needed for each one. Sew one edge of each of these together about $\frac{1}{8}$ inch from the edge and then slip the tree in against the sewed edge. Seam the open side, draw up the fulness as much as the length of the tree permits, and the case will produce the effect shown. Tiny bows at both ends complete the decoration. To make them very attractive as a gift, they are held together with an elastic trimmed with an artistic bow.

36. Take every precaution to keep shoes from getting wet, for this not only causes the leather to stretch, thus becoming one of the commonest of the contributing causes to shapelessness in shoes, but it also rots the leather and the threads with which it is sewed, so that seams soon rip and shoes lose their smartness completely. To prevent this, wear rubbers or galoshes during wet weather. If, however, an emergency arises and shoes do become wet, dry them slowly, as the leather is likely to crack if dried quickly. Stuffing the wet shoes with tissue paper helps to preserve their shape in drying. Leather shoes may have vaseline rubbed into them to soften the leather. This also helps to make them nearer water-proof.

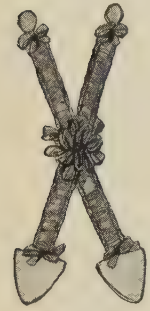


FIG. 3

37. Care and Cleaning.—Keep all shoes clean, well-brushed, and polished. A brush is preferable to a cloth in applying paste polish, as it works the dressing into all of the crevices. Leave the polish on a few minutes before polishing. Then brush with a stiff brush, or rub with a cloth. A piece of sheepskin with the wool attached, either tacked to a block to form a brush, or sewed to the palm of an old glove, makes an excellent polisher.

If possible, have two pairs of shoes that may be worn on alternate days. This lengthens the life of the shoes, as they can be thoroughly aired. Shoes should be aired after each wearing, as perspiration rots the lining.

38. *White canvas shoes* are usually washed quickly with soap and water, rinsed, and as much surplus moisture as possible wiped off with a soft cloth before applying the commercial dressing. They should be dried on shoe-trees to prevent shrinking and losing their shape.

39. *Suède shoes* should not be worn in wet weather, as rubbers or galoshes pack down the nap and leave shiny spots wherever they rub the shoes. These may be remedied to some extent, however, by brushing the shoes with a fine wire brush, or rubbing them with steel wool. Grease spots may be removed from light-colored suède shoes with gasoline or any commercial dry-cleaning fluid. A powder dressing for suède shoes may be obtained at any shoe store in a color to match the shoes. Also, a shoe-stick, which is described in Art. **128,** Chapter II, is favored by some persons, especially when the shoes are of light color. Liquid dressings are prepared for black suède shoes.

40. *White* or *light-colored kid* shoes are best cleaned with dry-cleaning agents. For this purpose, there are commercial preparations on the market, which can be used satisfactorily according to the directions that accompany each preparation and also by reference to the spotting precautions in Art. **28,** *Dry Cleaning.*

Washable kid shoes may be cleaned by the same means applicable to washable kid gloves, as explained in Art. **95,** *Dry Cleaning.*

41. *Rubbers* and *galoshes* should have mud cleaned from them immediately, as it rots and dulls the rubber if left on for any length of time.

Do not allow rubbers to become too hot, as intense heat is very hard on the rubber. Keep them standing right side up when not in use.

42. Shoe polish and polishing brushes should have a definite and convenient place where it is almost easier to use them than to avoid using them. With the possessing and using of a shoe-shining kit, either ready prepared or made up at home, the condition of the family shoes will soon show an encouraging improvement.

43. Repairing.—If shoes are well-shaped and well-made of good leather, it is worth while having full soles hand-sewed onto them. Such soles will have a better appearance than half soles, though half soles also are worth while.

Small rips in shoes should be mended at once. Very often this can be done at home. Heels must be kept straight, as suggested above.

MENDING CONVENIENCES

44. Organizing Mending Supplies.—The housewife will find that the task of keeping the family clothing in repair is greatly reduced if she keeps the necessary articles grouped in a convenient place. A sewing table, perhaps of the Martha Washington type, with commodious drawers, as illustrated in Fig. 4, is excellent, but, in case one is not accessible, a well-equipped mending basket will serve very well. This basket and a comfortable chair should be kept in some place so as to be easily accessible and permit the use of odd minutes for mending. Also, it is a good plan to have nearby a box or another convenient container for the garments and small articles needing repair. If this plan is followed, it is quite surprising how much may be accomplished in a few minutes, since all the necessary articles are at hand and no time need be lost in collecting them. To save even more time, keep a cushion in which are needles threaded with various colors and sizes of thread.

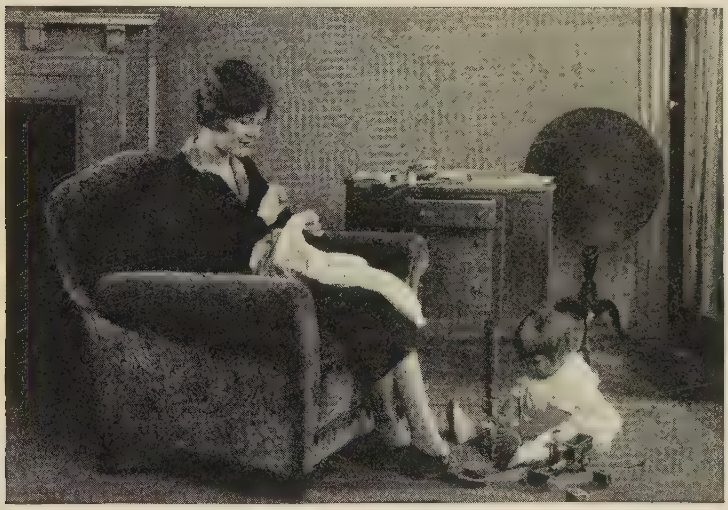


FIG. 4

45. Contents of Mending Basket.—The well-equipped mending basket should contain, among other things, the following articles, which are practically always needed in such work:

Needles
Pins
Pincushion
Thimble
Emery bag
Scissors
Buttons
Snap fasteners
Hooks and eyes
Thread of various sizes and colors, both cotton and silk
Tape, both straight and bias
Scraps of material as near like garments as possible
Darner
Darning cotton, silk, and wool

46. Kinds of Mending Baskets.—A mending basket may be of the time-honored, commodious, and well-filled type shown in Fig. 5, or it may be a little ten-cent-store basket stocked from the ten-cent-store notion counter, as shown in Fig. 6.

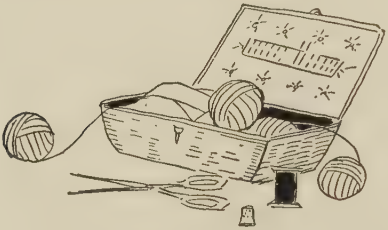


Fig. 5

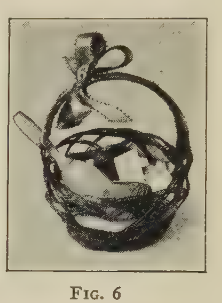


Fig. 6

A very decorative and unusual kind of mending basket might take form from the idea featured in Fig. 7, which utilizes an inverted lamp-shade frame that has been covered inside and outside with pretty material and braid and that has pockets for some of its fittings. A piece of cardboard covered and sewed to the frame makes a substantial bottom.

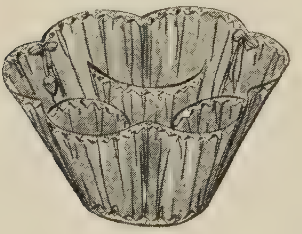


Fig. 7

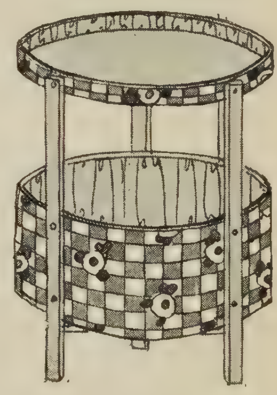


Fig. 8

In a home where there is a handy man or a boy of woodworking inclination, a cheese box can easily be converted into the spacious work box in Fig. 8, the cover of the box forming a separate tray that will be found useful for holding such articles as are needed for immediate use. Covered on the outside with cretonne, chintz, or wall-paper and on the inside, with silk, silkaline, or ribbon, this becomes a very attractive work box.

47. It is advisable also to have at least needles, thread, thimble, and scissors in each bedroom. "Guest Room Bouquets" are very decorative, and conceal all of the commoner mending necessities. They may be purchased at almost any department store or novelty shop.

When traveling, any woman will appreciate the convenience of a small sewing kit just large enough to contain a few small spools of thread, darning cotton, a thimble, a package of needles, a pair of scissors, and a few pins.

STORING CLOTHING

NEED AND CAUTION

48. Service Increased by Storing.—The matter of the proper storing of clothing between seasons is one of great importance to the home maker. A great many garments may be worn for two or three or even more seasons, if they are cared for properly, not only while being worn, but during that period when they are not in use.

49. Dangers and Precautions.—In storing clothing, one must guard against wrinkling, stretching, fading, rubbing, dust, and insects. All garments, no matter what the material, should be clean when put away. Garments of firm materials that will not stretch may be left on hangers if properly covered. In fact, coats, skirts, and cloth dresses are best stored in this way. But if the material is sleazy, or the trimmings are heavy, or the skirt is circular so that it is likely to be stretched out of shape by its own weight, it is wiser to store such garments in boxes or drawers.

Garments that must be folded should have creases that correspond as nearly as possible with the folds into which the garment falls naturally when it is in use. Heavy garments should not be put on top of folded garments of lighter weight. As a further prevention against wrinkles, rumpled tissue paper may be put inside of the folds and sleeves. Plenty of paper should be used in folding woolen garments, as two parts of the material should not touch each other in storing.

STORAGE FACILITIES

50. Whether for clothing in daily use, or for that put away between seasons, storage facilities should be ample and orderly. Such facilities include closets, drawers, chests, and boxes. Rods through the length of a closet provide space for more hangers and make a more orderly arrangement possible. Wardrobes and closets filled with clothing should be aired frequently. Leaving the closet door open at night, too, prevents a "stuffy" odor.

51. Chests and Boxes.—Stores offer handsome chests that are an asset in any bedroom, sewing room, or upper hall. Those that are cedar or lined with cedar are the best to protect garments from moths, but the others can be made quite as unhospitable toward moths.

Soap boxes and the like can be made into shirtwaist boxes or window seats that will furnish storage room as well as do the usual chests. Lids can be made easy to manage by means of hinges, and the boxes can be covered inside and outside with wall-paper or cretonne. Also, in case storage space is very limited, a rather shallow box may have hinged cover and casters added, and be kept under the bed.

52. Sachet Bags.—The idea of sachet bags harks back to the time when about the first lady who ever laid away her finery tucked in also a few sweet-smelling blossoms. In different places and at different times, different means of spreading fragrance have been used, according to the national and temperamental preferences of the ladies of the various regions. For example, a sprig of heather is preferred in Scotland to the lavender of Southern Europe.

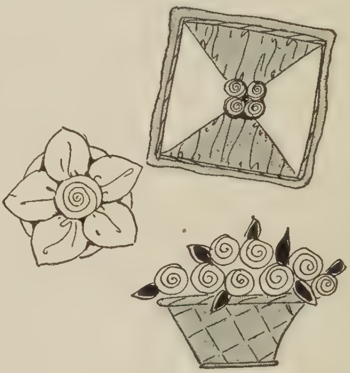


Fig. 9

In the course of evolution, little bags were made to hold the dried blossoms, perfumed cotton, or powder, so as to keep these from direct contact with milady's finery, and the bags also have changed in character. A few fancy ones for the modern chest are shown in Fig. 9.

A more modern adaptation of the scenting idea is an absorbent cake resembling in appearance a fancy, colored cake of soap, but feeling more like a soft stone. Perfume is poured on these little cakes from time to time, furnishing an easy means of keeping them efficacious.

53. Clothes Covers.—There are various types of clothes covers, some of which hold several garments. One of this type is the box cover illustrated in Fig. 10. To make this covering, which requires $3\frac{1}{4}$ yards of 36-inch material, proceed as follows:

Divide the material in half to give you two pieces, each 36 inches wide and $1\frac{5}{8}$ yards long. Then divide one of these pieces in half lengthwise of the material. This will give you two pieces, each 18 inches wide and $1\frac{5}{8}$ yards long. Lay one of these pieces aside for the present.

Join one of the selvage edges of the large piece with the raw edge of a smaller piece in a flat-fell seam, as at *ab*, Fig. 11. Fold the material lengthwise with the selvage edges together and with the wrong side of the material out. Stitch the two edges together at one end, beginning at a corner, as *c*, and stitching to *d*, 12 inches from *c*. Skip a space of 3 inches, and then stitch from *e* to the corner *f*.

FIG. 10

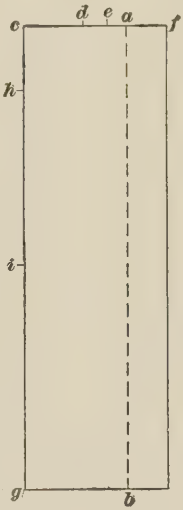


FIG. 11

Next, stitch from corner *c* toward corner *g* along the two selvages that were laid together, for about 8 inches to *h*. Leave an opening *hi* of 22 inches; then stitch from *i* to the corner *g*.

Turn back the edges of the opening *de* and finish with a single row of machine stitching, as shown in Fig. 12. The purpose of this opening is to allow inserting the hook of the hanger holding your dresses.

54. Now take the partly finished cover in the hands and draw the two thicknesses of material away from each other, forming a square at the top, as in Fig. 12, and having the seam line across the top, that is, *cf* directly on top of the seam line of the two selvage edges *cg* for $4\frac{1}{2}$ to 5 inches.

With the top still in the form of a square, from the point *c*, measure toward *f* $4\frac{1}{2}$ inches and mark this point with a pin. Through this point mark a line perpendicular to *cd*, as at *gh*, and stitch along this line directly across the corner. Do the same on the other corner *f*, following the line *ij*, and you will have a box end on each side.

Proceed in the same way for the bottom, but do not leave any opening. Then turn the bag right side out, when it will appear as in Fig. 10. Sew on snap fasteners at frequent intervals along *hi*, Fig. 11. The opening *de* can be made larger or smaller, depending on the number of garments you wish to hang inside the covering.

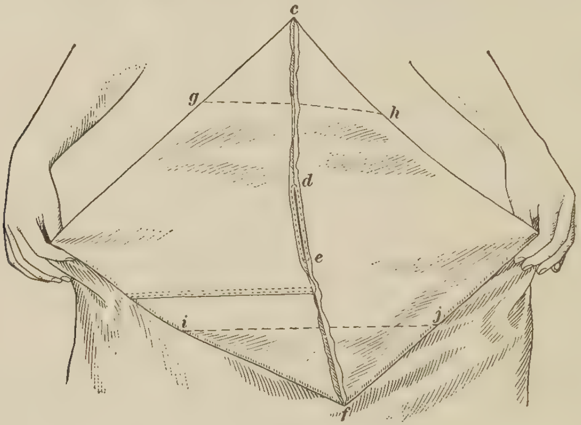


Fig. 12

55. To place a garment inside this covering, first place it on a hanger. Place the upper part of the garment into the covering through the opening *hi* and push the hook of the hanger through the opening *de* left for the purpose. Then pick up the body of the garment and drop it through the opening *hi* into the bag.

The extra piece of material 18 inches wide and $1\frac{5}{8}$ yards long may be used for making pockets for shoes on your closet door or for shoe bags or a laundry bag.

56. A more simple cover can be made by seaming a piece of cloth wide enough so that the tube will hold a hanger. The front may be opened up about 15 inches and finished like a shirt front;

the shoulders may be slanted off, if desired, and a collar of the turnover, or Peter Pan, type may finish the neck where the hook of the hanger comes through.

WHITE GOODS AND COTTON MATERIALS

57. White and light-colored garments must be clean when put away, for the stains of soil or perspiration become deeply set if not removed before storing. When discontinuing the use of them after a summer's wear, wash them and dry them without starching or ironing. When putting them away, protect them against turning yellow by wrapping them in blue tissue paper, or by placing them in a coarse muslin bag or an old pillow slip that has been made very blue with bluing.

Light-colored garments should be kept in the dark or in bags made of dark paper or cloth, light causing them to change color.

WOOLENS, VELVETS, SILKS, AND FURS

58. Preventing Moths.—Garments of velvet, wool, or fur require special precautions when stored because of the danger of their being attacked by moths. The harm is done, not by the millers, as many suppose, but by the larvæ, or caterpillars, which hatch from the eggs laid by the millers. Such repellants as cedar boxes, oil of cedar, cedar shavings, moth balls, pepper, and the like will only prevent the millers from getting in and laying their eggs; they will not prevent eggs already present from hatching. Careful cleaning and brushing to remove the eggs already there are, therefore, often more effective.

The first precaution is to sun and air the garments thoroughly and have them perfectly clean. Grease spots are particularly attractive to moths. When cleaned and aired, the garments may be put away in cedar chests, tar bags, or in heavy paper or cloth bags containing moth balls, cedar shavings, or camphor. If none of these are available, wrapping the garments in newspapers with plenty of newspaper in the folds will answer the purpose nicely, for the printers' ink is a repellant to the moths.

59. Furs.—Furs should, if it is at all possible, be stored by a furrier during the summer, or, if that is not practicable or desirable, they may be stored at home, the same precautions being taken as for wool and silk.

HATS

60. When hats are put away for the season, they should be thoroughly brushed, and if they are not to be worn again in the same style or shape, the trimmings should be removed. If possible, store each hat in a separate box to prevent rubbing and crushing, or if several are packed in one hat trunk, use tissue paper freely for stuffing. Trimmings may be cleaned and kept in a separate box. After they are cleaned, ribbons and pieces of silk or lace should be rolled and put away. Feathers, fur, and felt or cloth hats should have some moth repellant put in the box or bag to keep millers away.

SHOES

61. Even though shoes are kept in a shoe compartment in a wardrobe or chifforobe, shoe bags, especially for light-colored slippers and those of velvet or suède, which collect dust readily, are economizers of time that otherwise would have to be spent on cleaning.

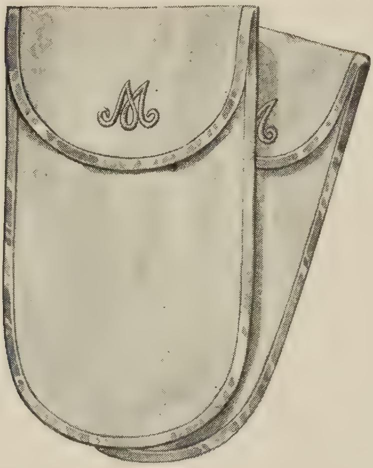


Fig. 13

Some shoes of small sizes and very thin soles and light-weight tops become stretched out of shape if they stand for any great length of time on shoe trees. Slippers of this nature should, after each wearing, be pulled into shape by hand and stuffed at the toe with tissue-paper before being put away.

62. Shoe Bags.—Some shoes can be wrapped together without danger of marring or losing their dressing. For these, wrappers and bags of various kinds may be made. The bags shown in Fig. 13 may be made of double thickness of crash with the edges bound with ribbon, or for rubbers they may be lined with rubberized cloth. Containers for silver- or gold-cloth slippers should, of course, be made of black cloth to prevent the slippers from tarnishing.

THE BUDGET

SCOPE AND VALUE OF BUDGETING

1. **Budgeting** is the estimating of the money you will spend over a given period, usually a year. Although the chief concern in this volume is the clothing division of budgeting, the budget in its entirety is discussed, so that its underlying idea may be thoroughly understood and its subdivisions properly proportioned.

2. As distinguished from accounting, budgeting, as explained above, is the proportioning of money that *will be spent*, while accounting is the record of what *has been spent* and for what it was spent.

Neither is of much benefit without the other, for there is no value in the mere collection and classification of figures, if helpful conclusions are not reached thereby. On the other hand, no person will be the happier, wealthier, or wiser for having estimated his expenses for a year in advance, if at the end of that time he has no record of what he spent, and, therefore, no means of ascertaining whether or not his budget was well-planned. The two, budgeting and accounting, must, therefore, go hand in hand.

3. Much discussed topics, like much discussed persons, sometimes become very unpopular. Yet many of them, like many persons, have enough individual value eventually to achieve standing on sheer merit. Such has been the case with budgeting, which is becoming an increasingly important factor in American individual and family, as well as national, life. The thoughtful person must realize that community, and even national, waste can be traced back to wrong standards of spending and the unsystematic use of resources in family and individual life. It follows, inevitably, that the place to apply the remedy is at the source of the trouble. Viewed in this light, budgeting becomes a privilege—an opportunity for every person, as a good citizen, to advance his interests and at the same time to help in making the position of the nation more secure.

4. Although the budget is such a valuable servant, some persons seem reluctant to employ it, perhaps because of the seeming marshaling out of their hands, so to speak, of the pleasant task of spending their incomes. But spending becomes even more enjoyable, and infinitely more satisfying, when carried on systematically according to a prearranged plan, calculated to eliminate wasteful use of resources by putting all disbursement of funds on a percentage basis. The budget, moreover, by forcing one to form definite standards of living, to face squarely the question of what things are essential to happy, well-rounded family or individual life, and, to fit them into the limits of one's income, is encouraging the sifting of values and the formation of habits of self-control.

DIVISIONS OF THE BUDGET

5. In its broader divisions, the budget covers *food*, *shelter*, *clothing*, *operating expenses*, *savings*, and *advancement*. These have been variously named, grouped, and subdivided by different investigators; but, in whatever manner indicated, they represent the items for which the family or individual income is spent.

6. The **food budget** covers money spent for groceries, meat, dairy products, and meals bought outside of the home.

7. The items included under **shelter** will vary, depending on whether you rent or own your home. In the former case, money spent for rent is, of course, the principal item. If you are paying for a home, payments on a mortgage or to the Building and Loan Association, together with the taxes and upkeep, make up the items under shelter. If, on the other hand, the home is paid for, the items that are included under shelter are taxes, insurance, and upkeep. Some people feel that, if the home is at a distance from the places where members of the family work, car fare to and from work should be included, also. This is a matter of personal opinion.

8. **The clothing budget** covers the purchase of new clothing, the repair and upkeep of all clothing, such as cleaning and sometimes laundering, and the purchase of any sewing supplies needed for remodeling or repairing garments. It covers dress accessories also.

9. **Operating expenses** include heat, light, water, telephone, service of various kinds, as well as replacements on equipment that is worn out, unless such items are included in the rent. Some persons prefer to include laundry under operating expenses rather than under the division of clothing expense, as previously suggested. However, in purchasing clothes, consideration should be given to the upkeep expense they will add to the operating-expense section of the budget.

10. **Savings** cover money invested in real estate, bonds, or securities, savings accounts, insurance, and new equipment that definitely adds value to the home. (This does not include anything which replaces worn-out equipment.)

Savings should occupy an important place in the budget. Set aside as large an amount as possible under this heading, which, of course, includes, in addition to cash deposited in the savings bank, purchases of real estate, money paid into building and loan associations, or on endowment insurance policies, as well as similar items. The usual amount is 8 to 16 per cent., but some authorities on finance insist that 40 per cent. of one's earnings is not too great a percentage to place in the savings column.

11. Advancement is the widest in scope of all of the divisions of the budget, for it includes education, travel, entertainment, gifts, church, charity, books, music, health, and any similar items. It should not total larger than the amount included under savings.

GENERAL BUDGET

PLANNING THE BUDGET

12. Estimating Your Income.—In order to make a properly functioning budget, it will be necessary to know what your income is, how much you have been in the habit of spending for each of the items mentioned, and what percentage of your whole income your expenditures for each represents.

In the case of the person or family living on a salary, determining the income is an easy matter. But in the case of persons, such as farmers, whose incomes vary from season to season, the problem is a little more difficult.

If your income is a variable quantity, you may not know what you will have this year, but you can go back and find out how much you made last year and the year before. Go back at least three years, or five if possible, and determine the total income for such period, dividing it by the number of years covered. This will give your average yearly income. In case you are in doubt as to the amount, underestimate rather than overestimate, for it is much easier to spend a little more than it is to clip back once the budget is planned.

13. In calculating incomes, do not overlook any of the side lines from which money is forthcoming. For example, concert playing or accompanying brings in extra dollars to music teachers, and butter, eggs, and milk bring in money to many a farmer whose chief means of support is truck farming. All of these extras fill the family treasury, so should be budgeted.

14. Keeping a Cash Account.—In order to have information about the amounts spent, one must keep a cash account, which is an accurate record of all expenditures made within a certain period of time. One needs such an account, first, as a basis upon which to plan the budget, and, after the budget is planned and in use, to check up the expenditures and keep them within the limits set. The cash account also reveals the points in the budget, if any, that need correcting.

15. As an example of how to use a cash account, suppose you decide to budget your grocery allowance. In order that you may know how much you should spend for vegetables, how much for meat, etc., begin by keeping a cash account of the groceries purchased for a week. The percentages spent for the various items furnish you with a plan on which to begin. You may find, however, that the next week your percentages differ; in all probability they will, for some of the things purchased the first week will still be on hand, or there may be more entertaining the second week. Because all of these items are variable, your percentages go up and down, and you begin to realize that a budget for a month or a year, based on a cash account for a similar length of time, is much more accurate.

16. Using the Envelope System.—Still another method, which is preferred by some, is to have a system of envelopes, each representing one of the main divisions of the budget and labeled accordingly. The money to be spent for each item for a week's time may be put into the corresponding envelope, or if it is not desirable to keep the money in the house, expenditures may be noted on slips of paper and these put into the proper envelopes. These amounts are then totaled at the end of the week and the totals recorded.

FORMS FOR BUDGETS

17. Varieties of Forms.—To many, accounting and budgeting may sound very complicated and alarming. Yet it need not be, for it becomes very fascinating business to arrange neat figures in their proper spaces when one has a conveniently arranged form with each column properly labeled.

Such forms are now available at any stationery or book store. By watching magazine advertisements, one can often find the addresses of companies who will furnish them free. Also, some banks furnish their customers with properly prepared blanks and help them in planning their budgets. If preferred, however, a blank book may be purchased and ruled off into the desired spaces. Some such forms are very simple, having only the six main divisions, while others are more complex, being subdivided according to the various expenditures that would naturally be listed under the main headings.

18. Suggested Forms.—Following are some examples of blank forms which you may use as guides in ruling your own book or in selecting ruled ones. All of these forms cover a month, but figures are supplied for only the first few days in order to show you just how to proceed in the use of the form.

Form No. 1 covers the needs of the business girl and is necessarily broad in scope, since her finances are usually quite distinctly separated from those of the family group and her personal account must hence provide for a wide range of expenditures.

For the housewife, on the other hand, who has both household and personal accounts to handle, it has seemed necessary to provide two forms, *Form No. 2* and *Form No. 3*.

19. The Home Woman's Account.—It is assumed, in presenting a blank form for the home woman's personal account, that she has definitely assigned to her a certain percentage of the family income. It may be, however, that instead of a definite amount set aside for her own personal use, she has only what she can salvage from the household purse; then, her personal allowance is no doubt quite variable and difficult to depend on. If such is the case, *Form No. 2* will prove very helpful in apportioning the household expenses wisely and insuring to the housekeeper a certain amount, or percentage, which she can definitely depend on for her own use. In providing for the wisest spending of this, she will obtain help from *Form No. 3*.

20. The Percentage Plan.—The three forms given here cover every expenditure that any one will be likely to make, and leave

THE BUSINESS GIRL'S ACCOUNT FO

	ESTIMATED AMOUNT $___ ACTUAL AMOUNT $___			ESTIMATED AMOUNT $___ ACTUAL AMOUNT $___				EST A		
	SAVINGS			CLOTHING				OPERATING		
								FOOD		SHELTER
DATE	RECEIPTS	SAVINGS ACCOUNTS AND INVESTMENTS	LIFE INSURANCE	NEW	REPAIRS AND SEWING SUPPLIES	DRY CLEANING AND SHINES	LAUNDRY	BOARD	LUNCHES AND SPREADS	ROOM RENT
1										20.00
2				10.00			1.50			
3										
4			33.75			.25			1.00	
5					.35			30.00		
6										
7										
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28										
29										
30										
31										

NO. 1

MONTH OF , 19

MOUNT $___
OUNT $___

ESTIMATED AMOUNT $___
ACTUAL AMOUNT $___

EXPENSES			ADVANCEMENT								
MISCELLANEOUS						RECREATION					
SUNDRIES	GROOMING AND TOILET ARTICLES	STATIONERY AND STAMPS	HEALTH	CHURCH AND CHARITY	GIFTS	THEATER LECTURES CONCERTS	VACATION AND TRAVEL	BOOKS AND MAGA-ZINES	CLUB DUES	LUXURIES	DAILY TOTALS
		.25									21.25
.50											12.00
	1.50					3.00		.25			4.75
											35.00
											30.35
								MONTHLY TOTALS			

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HOME WOM

	ESTIMATED AMOUNT $___ ACTUAL AMOUNT $___				ESTIMATED AMOUNT $___ ACTUAL AMOUNT $___				ESTIMATED AMOUNT $___ ACTUAL AMOUNT $___		
		SAVINGS			CLOTHING				FOOD		
DATE	INCOME	INVESTMENTS	LIFE INSURANCE	EQUIPMENT	(ONE SPACE FOR EACH MEMBER OF FAMILY)				MEAT	DAIRY AND PRODUCE	GROCERIES
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
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29											
30											
31											

FORM NO. 2

OMAN'S FAMILY CASH ACCOUNT FOR THE MONTH OF

NT $___ T $___		ESTIMATED AMOUNT $___ ACTUAL AMOUNT $___				ESTIMATED AMOUNT $___ ACTUAL AMOUNT $___						
		SHELTER				OPERATING EXPENSES						
RIES	MEALS OUT	TAXES	RENT AND INTEREST	UPKEEP	PHONE AND POSTAGE	WATER LIGHT FUEL	LAUNDRY AND SERVICE	SUPPLIES	CARFARES OR AUTO UPKEEP	OTHER ITEMS	HEALTH	EDUCATION

MATED AMOUNT $___ TUAL AMOUNT $___											
VANCEMENT							LUXURIES				
S NES	CHURCH CHARITY	GIFTS	PERSONAL ALLOWANCE OTHER THAN CLOTHING				TRAVEL	SOCIAL	CANDY SMOKES	THEATERS CONCERTS MOVIES	DAILY TOTALS

S

93960

FORM NO. 3

HOME WOMAN'S PERSONAL CASH ACCOUNT FOR THE MONTH OF , 19

		ESTIMATED AMOUNT $____ ACTUAL AMOUNT $____			ESTIMATED AMOUNT $____ ACTUAL AMOUNT $____						
		CLOTHING			MISCELLANEOUS						
DATE	RECEIPTS	NEW	REPAIRS AND SEWING MATERIAL	DRY CLEANING AND SHINES	CARFARE AND TAXIFARE	SUNDRIES	TOILET ARTICLES AND GROOMING	STATIONERY AND STAMPS	CLUB DUES	GIFTS	DAILY TOTALS
1											
2											
3											
4											
5											
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spaces for the percentages allowed by the budget and the actual amounts spent, so that these can be compared easily.

The income should be so apportioned that a definite percentage of it goes under each of the broader headings, the percentage in each case depending on the income. With the smaller incomes, the greater portion will be spent for food, shelter, and clothing, leaving very little for savings and cultural advantages or advancement. As the amount of the salary advances, more will be used for the latter items, and smaller percentages will go for the necessities. The size of the family also affects the percentages allowed for various headings.

21. Local prices vary so much that a definite amount will go farther in some communities than in others. It is impossible, on this account, to give hard and fast rules as to the percentages to be apportioned to the different divisions. The following averages will, however, help you in estimating your own budget percentages. Whatever percentages you choose should, of course, total 100 per cent.

Items	Per Cent.
Savings	8–16
Food	20–30
Shelter	15–20
Clothing	10–20
Operating	12–18
Development	15–25

CLOTHING BUDGET

SUITING IT TO THE INDIVIDUAL

22. So important is the clothing division, and of such close connection to this volume, that it is taken up as a budget in itself and called the *Clothing Budget*, although, of course, it can never be independent of the other divisions, for the amount of money to allow for it depends on the amounts allowed for the other divisions of the budget. Any attempt to make the clothing budget independent of the rest would result in either undue extravagance or unnecessary economy.

23. Planning Your Budget.—To make a clothing budget that will be in every way suited to your own individual case, will probably be impossible at first. But you will find the one on Page 250 most helpful as a guide.

In starting your budget, go over in your mind your expenditures for clothing during the past year. Jot these down as nearly as you can remember them and add up the amounts. The sum should be between 10 and 20 per cent. of your income—usually about 16 per cent. If it exceeds 20 per cent., you may know that you are spending too much for clothes at the expense of some other division of the budget. If it is very far below the minimum figure, you are not dressing so well as you can afford and are, thereby, doing yourself an injustice.

24. Individual Exceptions.—Of course, there are individual cases where irregularities in the amount, running to either extreme, are permissible. For example, there is the business girl who feels justified in exceeding the percentage mentioned for clothes because in her case up-to-the-minute clothing of sufficient variety forms a part of her stock in trade, so to speak. Spending less for her clothes would be poor economy, indeed, were it to result in a lowering of her status and thereby a lessening of her earnings.

Then, too, there is the home woman whose husband's position is such as to demand that his family dress well and who may feel compelled to rob some other division of the budget to add to the allowance for clothes.

On the other hand, there is the home woman who is inclined to stint her own clothing budget in order that some other member of the family, perhaps a daughter in college, may be better dressed. Or, there is the business girl who is supporting a mother or dependent children or who is still paying for her education and who may feel it necessary to reduce as much as possible her expenditures for clothing.

25. Satisfaction of Systematic Spending.—Whether you lean toward one of these extremes or are just an average person with an average income, you will find profit and an undreamed-of satisfaction in the use of the clothing budget.

One girl said, "But it would take all the joy out of spending to know that I could use only a certain percentage of my income for clothes." On the contrary, after one has tried it, the budget gives a feeling of greater liberty. Without it, a coveted pair of shoes, for example, might seem an extravagance that, were a proper budget kept and consulted, one might well be able to afford and to enjoy without feeling that one was robbing oneself of a dress or a blouse or other needed articles.

MAKING A ONE-YEAR BUDGET

26. Subdivisions of the Clothing Budget.—The clothing budget has a number of subdivisions, usually as follows: Outer garments, undergarments, hats and gloves, shoes and hose, accessories, and cleaning and repair.

Now begin with the whole clothing allowance for the year and consider that as 100 per cent., whether the actual amount is $100 or $1,500. Then go over the list you have made, this time arranging the items under the proper headings, and figure approximately what percentage of all that you spent for clothes went for outer garments, what percentage for undergarments, etc. In this way, you arrive at some basis for computing the percentages that you will use in your budget.

27. Percentages.—Following are percentages that have been worked out from the experience of a large group of women. Illustrative of the percentages are also the sums that they represent when applied to budgets allowing $100, $250, and $400 for clothing. Your own budget will not necessarily follow these percentages exactly, but these figures will show you wherein you have probably

CLOTHING BUDGET

Item	Range Per Cent.	Average Per Cent.	$100 Budget	$250 Budget	$400 Budget
Outer wear	43 to 50	47	$ 47.00	$117.50	$188.00
Underwear	5 to 16	11	11.00	27.50	44.00
Hats and Gloves	12 to 15	14	14.00	35.00	56 00
Shoes and Hose	10 to 15	13	13.00	32.50	52 00
Miscellaneous	5 to 10	8	8.00	20.00	32.00
Cleaning and Repair	5 to 10	7	7.00	17.50	28.00
Total	....	100	$100.00	$250.00	$400.00

not been spending so efficiently as you would if you kept nearer to these averages. Each budget is, however, an individual problem and must be worked out to fit the case in question.

MAKING A THREE-YEAR BUDGET

28. Apportioning the Items.—A clothing budget, in order to be practical, must be made to cover a period of three years, due to the fact that many of the garments wear for that length of time and need not be purchased new each year. Hence a garment to be worn for two years may be listed in the first year's expenditures and need not appear at all in the second year's schedule. Or, its cost may be divided by two, and half of the amount charged to each year. The former plan is usually considered preferable because the money is actually taken from one year's allowance, and considering it in that way merely releases so much more money the second year to be used for other garments.

29. Specimen Budget.—Following is a clothing budget made to cover a period of three years, allowing $150.00 a year or $450.00 for the three-year period. It permits of some garments, such as coats, suits, and hats, being purchased ready-made, and others, such as dresses and underwear, being made at home. The purchases of any one year will not represent a complete wardrobe, as the budget takes for granted that any woman has on hand some wearable

THREE-YEAR CLOTHING BUDGET OF $150 A YEAR

Items	Per Cent.	Yearly Allowance	Three-Year Allowance
Outer garments..............	47	$ 70.50	$211.50
Undergarments...............	11	16.50	49.50
Hats and Gloves.............	13	19.50	58.50
Shoes and Hose..............	15	22.50	67.50
Miscellaneous................	7	10.50	31.50
Cleaning and Repair..........	7	10.50	31.50
Total......................	100	$150.00	$450.00

garments under each division. The items given are merely replacements of things worn out.

No attempt has been made to have the budget fit any particular case, for no two budgets can be exactly alike. It is given with the sole purpose of illustrating the general workings of a three-year plan. When you have gained the idea from a study of the specimen budget, you can apply the method to your own case.

Purchases are planned so that, during the year when a coat must be bought, other expenditures will be lighter; or when a new summer hat must be purchased, last year's winter hat can be made over or retrimmed to lessen the cost of the winter hat and release more money for the new summer hat. By this sort of cooperation, which is possible only when the spending is planned ahead, one can be better dressed on the same amount of money than would be possible by any hit-and-miss, trial-and-error method of spending.

30. Spending the Budget Money.—A detailed statement of how these budgeted amounts might be spent is as follows:

Outer Garments

Item	First Year	Second Year	Third Year
Coat (winter)................	$55.00		
Coat (summer)...............		$20.00	
Silk dress (made at home)......		17.00	$14.00
Wool dress (made at home).....	10.00	18.00	12.00
Cotton dress (made at home)...	3.00		
Separate skirt (made at home)		7.00	5.00
Suit........................			22.50
Sweater....................		5.00	
Blouses (made at home).......	2.50	3.50	5.00
Party dress (made at home) ...			12.00
Total......................	$70.50	$70.50	$70.50

Undergarments

Item	First Year	Second Year	Third Year
Nightgowns at $1.00	$ 2.00	$ 2.00	$ 2.00
Combination suits at $1.00	3.00	2.00	3.00
Knickers (made at home)	1.00	1.00	1.00
Petticoats			2.95
Slips	2.95		
Vests at 35c.	1.05	1.05	1.05
Knitted combinations at $1.25	2.50	2.50	2.50
Brassières at 50c.	1.00	1.00	1.00
Corsets	3.00	3.00	3.00
Kimono		3.95	
Total	$16.50	$16.50	$16.50

Hats and Gloves

Item	First Year	Second Year	Third Year
Summer hat (second hat retrimmed third year)	$ 5.00	$10.00	$ 3.00
Winter hat (first year hat made over second year)	10.00	3.00	7.50
Sports hat	2.50	3.00	4.00
Kid gloves		2.50	3.00
Cotton gloves	2.00	1.00	2.00
Total	$19.50	$19.50	$19.50

Shoes and Hose

Item	First Year	Second Year	Third Year
Oxfords (2 pairs first year)	$17.00	$ 8.00	$ 8.50
Dress slippers at $10.00		10.00	10.00
Hose	5.50	4.50	4.00
Total	$22.50	$22.50	$22.50

Miscellaneous

Item	First Year	Second Year	Third Year
Belt		$ 1.00	$ .50
Handkerchiefs	$ 2.00	2.50	2.50
Umbrella	5.00		
Galoshes		4.00	
Rubbers	1.25	1.25	1.25
Beads or other accessories	1.75		.50
Collars		1.00	.75
Ties	.50	.75	
Hand bag			5.00
Total	$10.50	$10.50	$10.50

Cleaning and Repair

Item	First Year	Second Year	Third Year
Shoe repair	$ 2.00	$ 2.00	$ 2.00
Cleaning preparations	1.95	1.95	1.95
Laundry supplies	6.00	6.00	6.00
Shoe polish and cleaners	.30	.30	.30
Darning cotton	.25	.25	.25
Total	$10.50	$10.50	$10.50

31. Record of Clothing Expenditures.—It is often desirable to make a summary of the year's expenditures for clothing, such a summary serving as a concise record for reference in planning and spending the next year's budget.

Form No. 4 shows the items of the preceding budget that might be purchased in January and February, recorded in this manner in order to show the method. Although items are given for only two months, all items for the other months should be listed in the same way.

32. Varying Budget Items.—The items of budgets of the nature of the preceeding one will, of course, vary in their range; for, in

FORM NO. 4

Clothing Items for the Year of 19__ (For Use of Home or Business Woman)

DATE Mo. Day	Outer Garments	Price	Undergarments	Price	Hats Gloves	Price	Shoes Hosiery	Price	Miscellaneous	Price	Cleaning Repairs	Price	Monthly Totals	Total
Jan. 10			Brassière	$0.50							Soap	$1.00		
" 15	Blouse	$2.50												
" 18							Oxfords	$8.50			Darning Cotton	.25	January	$12.75
Feb. 3			Corset	3.00										
" 12			Nightgowns	2.00			Silk Hose	2.00						
" 16									Handkerchiefs	$0.50	Shoe Polish	.10	February	7.60

making such a budget, it is necessary to take into consideration whether you are a home woman or a business girl. For example, if you are a home woman, you need house dresses and aprons for which the business girl has little or no use. You also have more leisure than she, and will, therefore, need more afternoon dresses. She, on the other hand, needs tailored suits and blouses in greater abundance. In any event, keep an exact record of the items, regardless of their nature.

STRETCHING CLOTHING-BUDGET DOLLARS

33. Planning Your Purchases. There are a number of ways in which to get the greatest value from your clothing money. First, list all of the wearable clothing that you have on hand, putting each article under the proper heading, such as outer garments, undergarments, etc. Then decide what you must purchase to complete your wardrobe for the season, remembering that a well-supplied wardrobe is a great satisfaction, yet contradictorily enough can prove a real handicap. Have clothes enough to provide variety, with a good dress and a service dress always ready for emergencies. But don't plan too many clothes. They dwarf your own delight and can prove a burden rather than a joy.

To keep up with fashion and to know the joy of a new garment now and then, buy few things. Then treat yourself to a new dress occasionally.

34. Making Your Own Clothes.—The greatest help of all in stretching the dollars in your clothing budget is to learn to make your own clothes. If you have never known the joy of making your own garments and the great satisfaction that comes from having clothing that is individually becoming to you, that expresses your own personality, and yet costs very much less than ready-to-wear clothing and is much more substantially constructed, then you have indeed a pleasure in store. To see what savings actually can be effected through acting as your own modiste, examine the comparative prices of the garments necessary for a whole outer wardrobe when made at home and when purchased ready-made, as shown in the above summary. If you made all these eleven garments for yourself, you would have a lovely wardrobe, from morning dress to night-time negligée, at a cost of only $99.65, effecting a saving of over $130. Then you would know that each garment was right in design, in color, in fit, in finish, as well as in price. So altogether you could experience complete satisfaction.

SUMMARY OF COSTS

Garment	Ready-to-Wear Price	Cost of Materials
Morning dress	$ 3.25	$ 1.01
Street dress	22.50	7.27
Suit	29.00	9.91
Tailored blouse	7.48	4.57
Dress blouse	7.85	4.68
Afternoon dress	32.50	14.07
Dinner dress	29.75	13.93
Service coat	34.00	13.71
Dance frock	19.50	6.59
Evening wrap	39.00	21.63
Negligée robe	4.95	2.28
Total	$229.78	$99.65
Total saving effected, $130.13.		

"The dress heavily marked with dollars is never a happy dress to wear."

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